


STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☐

| | | | | | | | | | | | |
|---|------------------|--------------------|--|---|---------------------------|---|---------------|-------------------------------------|-----------------|---------------|--|
| APPLICATION FOR PERMIT TO DRILL | | | | | | 1. WELL NAME and NUMBER Ute Tribal 12-04-E4 | | | | | |
| 2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/> | | | | | | 3. FIELD OR WILDCAT BRUNDAGE CANYON | | | | | |
| 4. TYPE OF WELL Oil Well Coalbed Methane Well: NO | | | | | | 5. UNIT or COMMUNITIZATION AGREEMENT NAME | | | | | |
| 6. NAME OF OPERATOR PETROGLYPH OPERATING CO | | | | | | 7. OPERATOR PHONE 208 685-7685 | | | | | |
| 8. ADDRESS OF OPERATOR 960 Broadway Avenue, Ste 500, Bosie, ID, 83703 | | | | | | 9. OPERATOR E-MAIL ppowell@pgei.com | | | | | |
| 10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) 1420H624744 | | | 11. MINERAL OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/> | | | 12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/> | | | | | |
| 13. NAME OF SURFACE OWNER (if box 12 = 'fee') Petroglyph Operating Co., Inc. | | | | | | 14. SURFACE OWNER PHONE (if box 12 = 'fee') 435-722-2531 | | | | | |
| 15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee') P.O. Box 607, , | | | | | | 16. SURFACE OWNER E-MAIL (if box 12 = 'fee') | | | | | |
| 17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN') | | | 18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/> | | | 19. SLANT VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/> | | | | | |
| 20. LOCATION OF WELL | | FOOTAGES | | QTR-QTR | SECTION | TOWNSHIP | | RANGE | MERIDIAN | | |
| LOCATION AT SURFACE | | 535 FNL 1556 FWL | | NENW | 12 | 5.0 S | | 4.0 W | U | | |
| Top of Uppermost Producing Zone | | 660 FNL 660 FWL | | NWNW | 12 | 5.0 S | | 4.0 W | U | | |
| At Total Depth | | 660 FNL 660 FWL | | NWNW | 12 | 5.0 S | | 4.0 W | U | | |
| 21. COUNTY DUCHESNE | | | 22. DISTANCE TO NEAREST LEASE LINE (Feet) 535 | | | 23. NUMBER OF ACRES IN DRILLING UNIT 480 | | | | | |
| | | | 25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 2001 | | | 26. PROPOSED DEPTH MD: 6139 TVD: 6026 | | | | | |
| 27. ELEVATION - GROUND LEVEL 5968 | | | 28. BOND NUMBER LPM4138153 | | | 29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE 43-8342 | | | | | |
| Hole, Casing, and Cement Information | | | | | | | | | | | |
| String | Hole Size | Casing Size | Length | Weight | Grade & Thread | Max Mud Wt. | Cement | Sacks | Yield | Weight | |
| Cond | 20 | 14 | 0 - 54 | 5.0 | Unknown | 10.0 | Class G | 25 | 1.17 | 15.8 | |
| Surf | 12.25 | 8.625 | 0 - 494 | 24.0 | J-55 ST&C | 10.0 | Class G | 227 | 1.17 | 15.8 | |
| Prod | 7.875 | 5.5 | 0 - 6139 | 15.5 | J-55 LT&C | 10.0 | Class G | 458 | 1.92 | 12.5 | |
| | | | | | | | Class G | 344 | 1.46 | 13.4 | |
| ATTACHMENTS | | | | | | | | | | | |
| VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES | | | | | | | | | | | |
| <input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER | | | | | | <input checked="" type="checkbox"/> COMPLETE DRILLING PLAN | | | | | |
| <input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE) | | | | | | <input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER | | | | | |
| <input type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED) | | | | | | <input checked="" type="checkbox"/> TOPOGRAPHICAL MAP | | | | | |
| NAME Ed Trotter | | | | TITLE Agent | | | | PHONE 435 789-4120 | | | |
| SIGNATURE | | | | DATE 11/02/2012 | | | | EMAIL edtrotter@easilink.com | | | |
| API NUMBER ASSIGNED 43013518400000 | | | | APPROVAL <div style="text-align: center;">  Permit Manager </div> | | | | | | | |

CONFIDENTIAL
NINE POINT DRILLING PLAN
PETROGLYPH OPERATING COMPANY, INC
UTE TRIBAL 12-04-E4
NW NW, SEC 12, T5S, R4W
DUCHESNE COUNTY, UTAH

1. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

| Formation | | Subsea | TVD | MD |
|----------------------------|-----------------------------|--------|------|------|
| Rig KB=~14' above GGL | | 5981 | 0 | 0 |
| Surface Formation = Uinta | | | | |
| Uinta | | 5967 | 14 | 14 |
| Green River | | 4775 | 1206 | 1209 |
| Trona | | 3455 | 2526 | 2569 |
| Mahogany Shale | | 3302 | 2679 | 2728 |
| "B" Marker | Waterflood Unit Interval | 2165 | 3816 | 3907 |
| "X" Marker | | 1665 | 4316 | 4420 |
| Douglas Creek Marker | | 1525 | 4456 | 4561 |
| "B" Limestone | | 1125 | 4856 | 4963 |
| Base Castle Peak Limestone | | 585 | 5396 | 5503 |
| BSCARB | | 185 | 5796 | 5903 |
| Wasatch | | | -65 | NDE |
| Rig TD | | -45 | 6026 | 6139 |

2. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERAL FORMATIONS:

| Substance | Formation | Subsea | TVD | MD |
|---|---------------|--------|------|------|
| Base of moderately saline ground water* | Uinta | 5950 | 31 | 31 |
| Oil/Gas | Douglas Creek | 1525 | 4456 | 4561 |
| Oil/Gas | Castle Peak | 585 | 5396 | 5503 |

Any water encountered during drilling shall be sampled, analyzed and reported to BLM, Vernal office using State of Utah DOGM Form 7 *Report of Water Encountered during Drilling*. The following analyses shall be performed on any water encountered:

| | | | |
|-------------------------|---------------------|---------------------|--------------------|
| Flow rate (or blowtest) | Temperature | pH | TDS |
| Dissolved Iron | Dissolved Magnesium | Dissolved Bicarb. | Dissolved Sulfate |
| Dissolved Calcium | Dissolved Sodium | Dissolved Carbonate | Dissolved Chloride |

All depths through the "Base of moderately saline ground water"*, along with any water encountered below that depth which is less than 10,000 TDS, shall be protected by the surface casing or by lifting the cement of the production casing into the surface casing.

*Base of Moderately Saline Groundwater from Howells, Longson and Hunt, 1981, Utah State Technical Publication 92: The Base of the Moderately Saline Water in the Uinta Basin, Utah



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3. PROPOSED CASING PROGRAM:

| String | Hole | Casing | Top - MD | Bottom - MD | Weight lb/ft | Grade | Thread |
|------------|---------|--------|----------|-------------|--------------|--------|--------|
| Conductor | 20" | 14" | surface | 54' | steel | Cond'r | none |
| Surface | 12-1/4" | 8-5/8" | surface | 494' | 24 | J-55 | STC |
| Production | 7-7/8" | 5-1/2" | surface | 6139' | 15.5 | J-55 | LTC |

| String | Hole | Casing | Collapse | Burst | Tensile |
|------------|---------|--------|-----------|-----------|------------|
| Surface | 12-1/4" | 8-5/8" | 1,370 psi | 2,950 psi | 244,000 lb |
| Production | 7-7/8" | 5-1/2" | 4,040 psi | 4,810 psi | 248,000 lb |

- All casing will be new or inspected.
- The surface and production strings shall have a minimum of one (1) centralizer on each of the bottom three (3) joints.
- The production string shall have a minimum of one (1) centralizer for every three (3) joints from TD to the top of the "B" marker at 3907' MD.

4. PROPOSED CEMENTING PROGRAM:

| String | Top | Cement Description | Sacks | Excess | Weight (ppg) | Yield (ft³/sk) |
|-----------------|-----------------------|--|---------------------------------------|--------|--------------|----------------|
| | Bottom | | Vol (ft³) | | | |
| Conductor | 0 ----- 54 | Construction Grade Cement | Sufficient volumes to grout Conductor | | | |
| Surface | 0 ----- 494 | Class G +2% CaCl2 +0.25 lb/sk Cello Flake | 227 ----- 265 | 30% | 15.8 | 1.17 |
| Production Lead | 0 ----- 3907 | EXPANDACEM (Class G +additives) + 1 lb/sk Granulite TR¼ (LCM) | 458 ----- 880 | 30% | 12.5 | 1.92 |
| Production Tail | 3907 ----- 6139 | EXPANDACEM (Class G +additives) + 1 lb/sk Granulite TR¼ (LCM) | 344 ----- 503 | 30% | 13.4 | 1.46 |

- The 8-5/8" surface casing shall be cemented back to surface. In the event that during the primary surface cementing operation the cement does not circulate to surface, or if the cement level should fall back more than 8 feet from surface, then a remedial surface cementing operation shall be performed to insure adequate isolation and stabilization of the surface casing.
- The 5-1/2" production casing shall be cemented back to surface. In the event that during the primary cementing operation the cement does not circulate to surface, a remedial cementing operation shall be performed only if necessary to lift cement above the Trona at 2569' MD.



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5. MINIMUM PRESSURE CONTROL AND SAFETY EQUIPMENT:

- An 8", 2000 PSI, Double Ram BOPE with Hydraulic Closing Unit shall be used.
- A 2000 PSI Working Pressure Annular shall be used.
- The flowline shall have a minimum diameter of 10".
- Auxiliary equipment shall be a Kelly Cock, Bit Float, and a TIW valve with drill pipe threads.
- Spark arrestors shall be equipped on all engine exhausts within 100 feet of the wellbore.
- See attached 2,000 psi BOP schematic diagram.

BOPE TESTING PROCEDURE:

- The BOPE shall be tested by a professional tester to conform to Onshore Order #2.

6. MUD PROGRAM:

A. SURFACE HOLE

- The surface hole will be drilled with an air/mist system from 0' to 494'. All cutting shall be directed to pit.
- A trailer-mounted compressor with a capacity of 2000 CFM will be used. Compressor will have a safety shut-off valve located less than 15 feet from the driller's controls of the rig.
- The rat and mouse holes will be drilled with the air rig after surface casing is cemented.
- The 140 barrel water truck used with the deduster will be the source of kill fluid in the highly unlikely event of pressure being encountered during drilling of the surface hole.
- Operator requests the following variances from Onshore Order 2 part E during drilling of the surface hole. Operator will use air drilling techniques only on surface hole:
 - Operator requests a variance to regulations requiring the blooie line discharge to be 100' from the wellbore. Due to reduced location size, the blooie line discharge will be approximately 75' from the wellbore and securely anchored.
 - Operator requests a variance to regulations requiring an automatic igniter or continuous pilot light on the blooie line. A mister shall be on the end of the blooie line.
 - Operator requests a variance to regulations requiring compressors be located in the opposite direction from the blooie line; a minimum of 100' from the wellbore. Due to the reduced location size, the compressors shall be located as close as is reasonable to the opposite direction from the blooie line and 75' from the wellbore.
 - Operator requests a variance to regulations requiring a BOPE on the hole when drilling the surface hole. An air bowl shall be utilized on the diverter system in place of a BOPE.



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B. PRODUCTION HOLE

- The production hole shall be drilled with a freshwater polymer system from 494' to 6139'. LSND mud if conditions warrant.
- Clay inhibition and hole stability shall be achieved with a Diammonium Phosphate (DAP) additive or similar source of clay-stabilizing ions. Anticipated mud weight is 8.3-8.8 lbs/gal. although mud weight up to 10lbs/gal may be used if necessary to prevent wellbore wall instability due to the planned inclination of the well.
- All cuttings and circulating medium shall be directed into the reserve pit. Total Dissolved Solids (TDS) are anticipated to be less than 3000 PPM.
- Sufficient mud inventory will be maintained on location in either tanks or the reserve pit during the drilling of the production hole to handle any adverse conditions that may arise.
- If necessary to control formation fluids or pressure, the system will be weighted with the addition of bentonite gel, and if pressure conditions warrant, with barite. Enough material shall be maintained on location to allow for the mudweight to be raised to 10.5 lbs/gal should need arise.
- During drilling operations, pit levels and flow from the well shall be monitored by instrumentation to include at least: a pit volume totalizer (PVT), a stroke counter, and a mud-flow indicator.
- A mud-gas separator shall be available on location.

C. HAZARDOUS MATERIALS AND POLLUTANTS

- Chromate additives **shall NOT** be used in the mud system on Indian lands without prior DOGM approval to ensure adequate protection of freshwater aquifers.
- Chemicals subject to reporting under SARA Title III in an amounts equal to or greater than 10,000 pounds annually **shall NOT** be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completion of this well.
- Extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities **shall NOT** be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completion of this well.
- Hazardous substances specifically listed by the EPA as a hazardous waste, as defined in 40 CFR 261 (D), or any substances that through their use would lead to the generation of a hazardous waste, **shall NOT** be used in association with the drilling, testing, or completion of this well.



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7. EVALUATION PROGRAM:

Logs: Triple Combo TD to base of surface casing (AIT, DSN, CDL)
Base of surface casing to surface (GR only)

Cores: None planned

DST: None planned

Testing: Operator plans no testing until the completion phase of the well.

8. ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:

- Operator anticipates Bottom Hole Temperatures below 150°F, the maximum temperature for DAP drilling fluids.
- No H₂S has been encountered or is known to exist from previous drilling in the area at this depth.
- Maximum pressure for hydrocarbon bearing zones at native conditions in this area is approximately 1535 PSI (0.25 PSI/ft gradient).
- This well is NOT in the vicinity of active injection wells. Nearby active injection can cause pressures up to a 0.433 PSI/ft gradient .

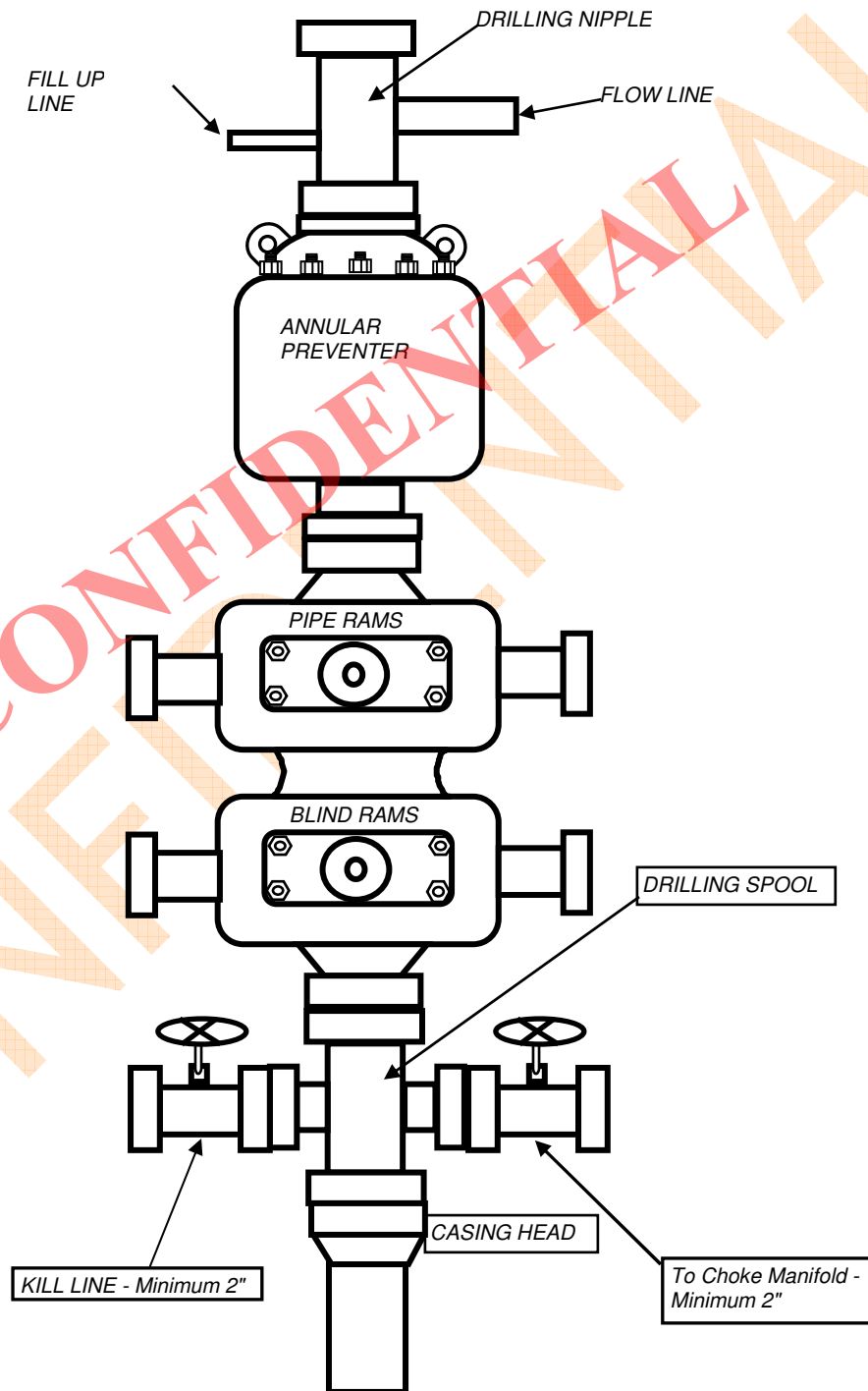
9. DIRECTIONAL WELL PLAN:

- Well shall be drilled directionally in order to limit surface disturbance.
- A Positive Displacement Motor with a bent sub of 1.25° to 1.75° will be used to control well path.
- A directional survey shall be taken at least one (1) time per 100' of drilling.
- Anti-collision equipment will not be used as there are no existing wells in the vicinity of the proposed well path.
- While cutting the Waterflood Unit Interval from 3907' to 5903', the actual well path may be allowed to vary up to 100' horizontally from plan in order to prevent excessive slide drilling. Above and below the Waterflood Unit Interval, variances in excess 100' horizontally from plan may be allowed.
- Directional drilling plan is attached.

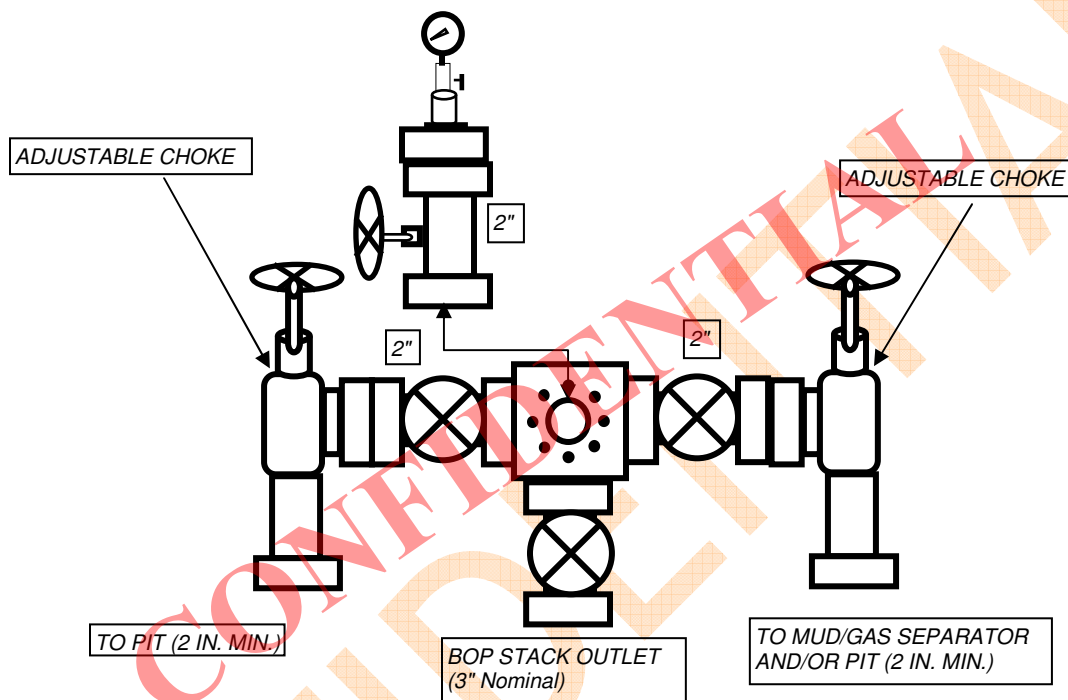


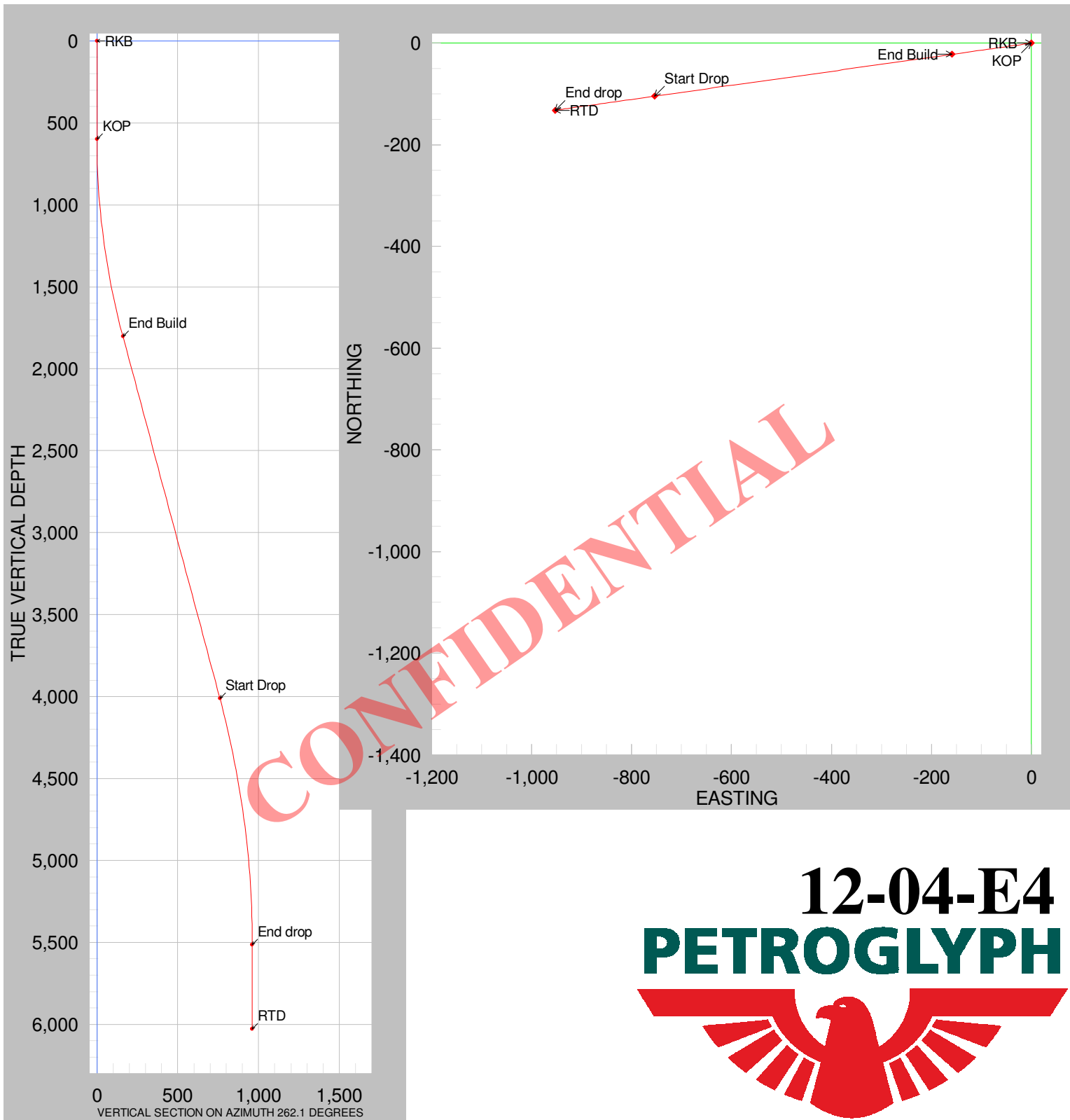
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TYPICAL 2,000 p.s.i. BLOWOUT PREVENTER



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TYPICAL 2,000 p.s.i. CHOKE MANIFOLD





| # | Reference | Type | MD | Inc | Azi | TVD | N | E | DLS | Vert S |
|---|------------|-----------|---------|-------|--------|---------|---------|---------|------|--------|
| 0 | RKB | Tie Point | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 |
| 1 | KOP | Vertical | 600.00 | 0.00 | 0.00 | 600.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2 | End Build | Build | 1816.00 | 15.20 | 262.10 | 1801.79 | -22.04 | -158.83 | 1.25 | 160.35 |
| 3 | Start Drop | Tangent | 4106.00 | 15.20 | 262.10 | 4011.67 | -104.56 | -753.55 | 0.00 | 760.77 |
| 4 | End drop | Drop | 5626.00 | 0.00 | 0.00 | 5513.91 | -132.11 | -952.08 | 1.00 | 961.21 |
| 5 | RTD | Vertical | 6139.00 | 0.00 | 0.00 | 6026.91 | -132.11 | -952.08 | 0.00 | 961.21 |

12-04-E4, Plan 1

| 12-04-E4, Plan 1 | | | | | | | | | | |
|--|-------|--------------------------|---------|---|---------|---------|---|-------|-------|---------|
| Operator Petroglyph Field Well Name 12-04-E4 Plan 1 | | | | Units feet, %/100ft County Duchesne State UT Country USA | | | 11:11 Thursday, October 18, 2012 Page 1 of 4 Vertical Section Azimuth 262.1 Survey Calculation Method Minimum Curvature Database Access | | | |
| Location 535' FNL 1556' FWL 12-5s-4w Site Slot Name Well Number Project | | UWI API | | MapZone SurfaceX SurfaceY Z Datum Surface Z | | | Lat Long Ref Surface Long Surface Lat Ground Level | | | |
| DIRECTIONAL WELL PLAN | | | | | | | | | | |
| MD* | INC* | AZI* | TVD* | N* | E* | DLS* | V. S.* | MapE* | MapN* | SysTVD* |
| ft | deg | deg | ft | ft | ft | %/100ft | ft | ft | ft | ft |
| *** RKB (at MD = 0.00) | | | | | | | | | | |
| 0.00 | 0.00 | 0.0 | 0.00 | 0.00 | 0.00 | | 0.00 | | | |
| 50.00 | 0.00 | 0.0 | 50.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| 100.00 | 0.00 | 0.0 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| 150.00 | 0.00 | 0.0 | 150.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| 200.00 | 0.00 | 0.0 | 200.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| 250.00 | 0.00 | 0.0 | 250.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| 300.00 | 0.00 | 0.0 | 300.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| 350.00 | 0.00 | 0.0 | 350.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| 400.00 | 0.00 | 0.0 | 400.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| 450.00 | 0.00 | 0.0 | 450.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| 500.00 | 0.00 | 0.0 | 500.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| 550.00 | 0.00 | 0.0 | 550.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| *** KOP (at MD = 600.00) | | | | | | | | | | |
| 600.00 | 0.00 | 0.0 | 600.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | |
| 650.00 | 0.63 | 262.1 | 650.00 | -0.04 | -0.27 | 1.25 | 0.27 | | | |
| 700.00 | 1.25 | 262.1 | 699.99 | -0.15 | -1.08 | 1.25 | 1.09 | | | |
| 750.00 | 1.88 | 262.1 | 749.97 | -0.34 | -2.43 | 1.25 | 2.45 | | | |
| 800.00 | 2.50 | 262.1 | 799.94 | -0.60 | -4.32 | 1.25 | 4.36 | | | |
| 850.00 | 3.13 | 262.1 | 849.88 | -0.94 | -6.75 | 1.25 | 6.82 | | | |
| 900.00 | 3.75 | 262.1 | 899.79 | -1.35 | -9.72 | 1.25 | 9.81 | | | |
| 950.00 | 4.38 | 262.1 | 949.66 | -1.84 | -13.23 | 1.25 | 13.36 | | | |
| 1000.00 | 5.00 | 262.1 | 999.49 | -2.40 | -17.28 | 1.25 | 17.44 | | | |
| 1050.00 | 5.63 | 262.1 | 1049.28 | -3.03 | -21.86 | 1.25 | 22.07 | | | |
| 1100.00 | 6.25 | 262.1 | 1099.01 | -3.74 | -26.99 | 1.25 | 27.24 | | | |
| 1150.00 | 6.88 | 262.1 | 1148.68 | -4.53 | -32.65 | 1.25 | 32.96 | | | |
| 1200.00 | 7.50 | 262.1 | 1198.29 | -5.39 | -38.84 | 1.25 | 39.21 | | | |
| 1250.00 | 8.13 | 262.1 | 1247.82 | -6.32 | -45.57 | 1.25 | 46.01 | | | |
| 1300.00 | 8.75 | 262.1 | 1297.28 | -7.33 | -52.84 | 1.25 | 53.35 | | | |
| 1350.00 | 9.38 | 262.1 | 1346.66 | -8.41 | -60.64 | 1.25 | 61.22 | | | |
| 1400.00 | 10.00 | 262.1 | 1395.94 | -9.57 | -68.98 | 1.25 | 69.64 | | | |
| 1450.00 | 10.63 | 262.1 | 1445.14 | -10.80 | -77.84 | 1.25 | 78.59 | | | |
| 1500.00 | 11.25 | 262.1 | 1494.23 | -12.11 | -87.24 | 1.25 | 88.07 | | | |
| 1550.00 | 11.88 | 262.1 | 1543.21 | -13.48 | -97.16 | 1.25 | 98.10 | | | |
| 1600.00 | 12.50 | 262.1 | 1592.09 | -14.93 | -107.62 | 1.25 | 108.65 | | | |
| 1650.00 | 13.13 | 262.1 | 1640.84 | -16.46 | -118.60 | 1.25 | 119.74 | | | |

12-04-E4, Plan 1

| | | | | | |
|------------------|------------|----------------|--------------|----------------------------------|-------------------|
| Operator | Petroglyph | Units | feet, %100ft | 11:11 Thursday, October 18, 2012 | Page 2 of 4 |
| Field | | County | Duchesne | Vertical Section Azimuth | 262.1 |
| Well Name | 12-04-E4 | State | UT | Survey Calculation Method | Minimum Curvature |
| Plan | 1 | Country | USA | Database | Access |

| | | | | | |
|--------------------|-----------------------------|------------------|--|---------------------|--|
| Location | 535' FNL 1556' FWL 12-5s-4w | MapZone | | Lat Long Ref | |
| Site | | SurfaceX | | Surface Long | |
| Slot Name | | SurfaceY | | Surface Lat | |
| Well Number | | Z Datum | | | |
| Project | | Surface Z | | Ground Level | |

DIRECTIONAL WELL PLAN

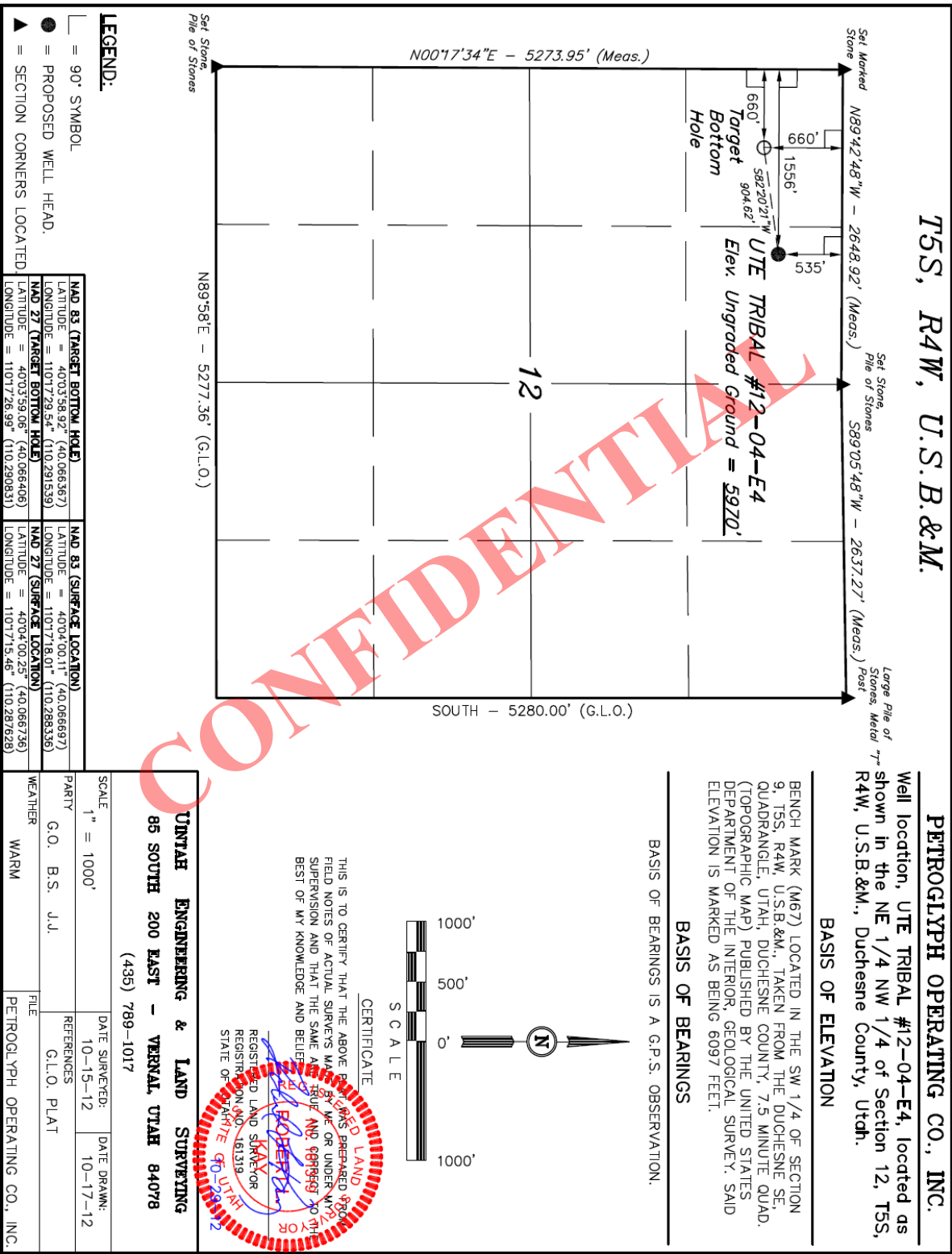
| MD* | INC* | AZI* | TVD* | N* | E* | DLS* | V. S.* | MapE* | MapN* | SysTVD* |
|---------------------------------|-------|-------|---------|--------|---------|--------|--------|-------|-------|---------|
| ft | deg | deg | ft | ft | ft | %100ft | ft | ft | ft | ft |
| 1700.00 | 13.75 | 262.1 | 1689.47 | -18.05 | -130.11 | 1.25 | 131.36 | | | |
| 1750.00 | 14.38 | 262.1 | 1737.97 | -19.72 | -142.15 | 1.25 | 143.51 | | | |
| 1800.00 | 15.00 | 262.1 | 1786.34 | -21.47 | -154.70 | 1.25 | 156.18 | | | |
| *** END BUILD (at MD = 1816.00) | | | | | | | | | | |
| 1816.00 | 15.20 | 262.1 | 1801.79 | -22.04 | -158.83 | 1.25 | 160.35 | | | |
| 1850.00 | 15.20 | 262.1 | 1834.60 | -23.26 | -167.66 | 0.00 | 169.27 | | | |
| 1900.00 | 15.20 | 262.1 | 1882.85 | -25.07 | -180.65 | 0.00 | 182.38 | | | |
| 1950.00 | 15.20 | 262.1 | 1931.10 | -26.87 | -193.63 | 0.00 | 195.49 | | | |
| 2000.00 | 15.20 | 262.1 | 1979.35 | -28.67 | -206.62 | 0.00 | 208.60 | | | |
| 2050.00 | 15.20 | 262.1 | 2027.60 | -30.47 | -219.60 | 0.00 | 221.70 | | | |
| 2100.00 | 15.20 | 262.1 | 2075.85 | -32.27 | -232.59 | 0.00 | 234.81 | | | |
| 2150.00 | 15.20 | 262.1 | 2124.10 | -34.08 | -245.57 | 0.00 | 247.92 | | | |
| 2200.00 | 15.20 | 262.1 | 2172.35 | -35.88 | -258.56 | 0.00 | 261.03 | | | |
| 2250.00 | 15.20 | 262.1 | 2220.60 | -37.68 | -271.54 | 0.00 | 274.14 | | | |
| 2300.00 | 15.20 | 262.1 | 2268.85 | -39.48 | -284.53 | 0.00 | 287.25 | | | |
| 2350.00 | 15.20 | 262.1 | 2317.11 | -41.28 | -297.51 | 0.00 | 300.36 | | | |
| 2400.00 | 15.20 | 262.1 | 2365.36 | -43.08 | -310.50 | 0.00 | 313.47 | | | |
| 2450.00 | 15.20 | 262.1 | 2413.61 | -44.89 | -323.48 | 0.00 | 326.58 | | | |
| 2500.00 | 15.20 | 262.1 | 2461.86 | -46.69 | -336.47 | 0.00 | 339.69 | | | |
| 2550.00 | 15.20 | 262.1 | 2510.11 | -48.49 | -349.45 | 0.00 | 352.80 | | | |
| 2600.00 | 15.20 | 262.1 | 2558.36 | -50.29 | -362.44 | 0.00 | 365.91 | | | |
| 2650.00 | 15.20 | 262.1 | 2606.61 | -52.09 | -375.42 | 0.00 | 379.02 | | | |
| 2700.00 | 15.20 | 262.1 | 2654.86 | -53.90 | -388.41 | 0.00 | 392.13 | | | |
| 2750.00 | 15.20 | 262.1 | 2703.11 | -55.70 | -401.39 | 0.00 | 405.24 | | | |
| 2800.00 | 15.20 | 262.1 | 2751.36 | -57.50 | -414.38 | 0.00 | 418.35 | | | |
| 2850.00 | 15.20 | 262.1 | 2799.61 | -59.30 | -427.36 | 0.00 | 431.46 | | | |
| 2900.00 | 15.20 | 262.1 | 2847.86 | -61.10 | -440.35 | 0.00 | 444.57 | | | |
| 2950.00 | 15.20 | 262.1 | 2896.12 | -62.90 | -453.33 | 0.00 | 457.68 | | | |
| 3000.00 | 15.20 | 262.1 | 2944.37 | -64.71 | -466.32 | 0.00 | 470.78 | | | |
| 3050.00 | 15.20 | 262.1 | 2992.62 | -66.51 | -479.30 | 0.00 | 483.89 | | | |
| 3100.00 | 15.20 | 262.1 | 3040.87 | -68.31 | -492.29 | 0.00 | 497.00 | | | |
| 3150.00 | 15.20 | 262.1 | 3089.12 | -70.11 | -505.27 | 0.00 | 510.11 | | | |
| 3200.00 | 15.20 | 262.1 | 3137.37 | -71.91 | -518.26 | 0.00 | 523.22 | | | |
| 3250.00 | 15.20 | 262.1 | 3185.62 | -73.72 | -531.24 | 0.00 | 536.33 | | | |
| 3300.00 | 15.20 | 262.1 | 3233.87 | -75.52 | -544.23 | 0.00 | 549.44 | | | |

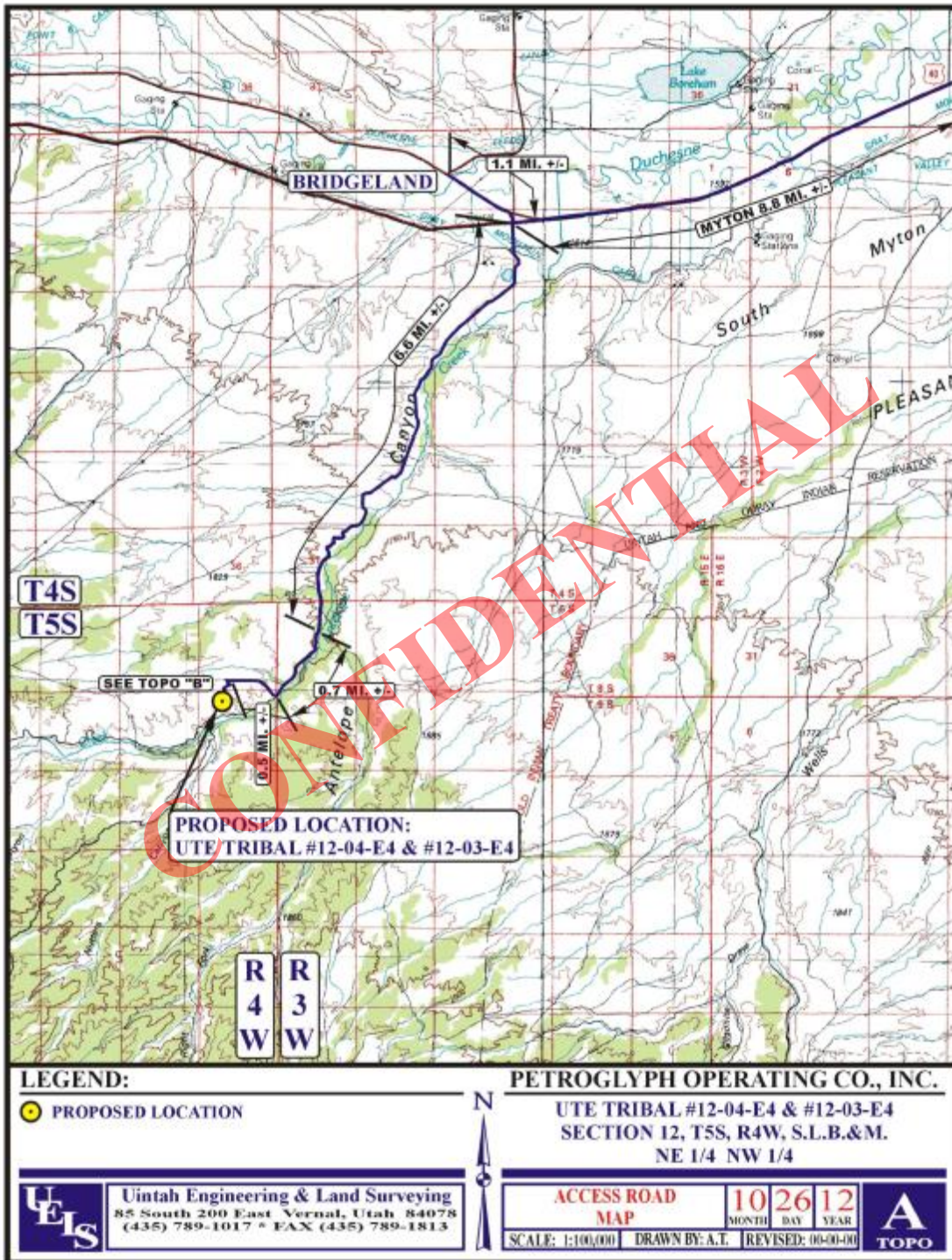
12-04-E4, Plan 1

| 12-04-E4, Plan 1 | | | | | | | | | | |
|----------------------------------|-----------------------------|-------------|-------------|----------------|--------------|-------------|--|---------------------|--------------|----------------|
| Operator | Petroglyph | | | Units | feet, %100ft | | 11:11 Thursday, October 18, 2012 Page 3 of 4 | | | |
| Field | | | | County | Duchesne | | Vertical Section Azimuth 262.1 | | | |
| Well Name | 12-04-E4 | | | State | UT | | Survey Calculation Method Minimum Curvature | | | |
| Plan | 1 | | | Country | USA | | Database Access | | | |
| Location | 535' FNL 1556' FWL 12-5s-4w | | | | | | MapZone | Lat Long Ref | | |
| Site | | | | | | | SurfaceX | Surface Long | | |
| Slot Name | UWI | | | | | | SurfaceY | Surface Lat | | |
| Well Number | API | | | | | | Z Datum | | | |
| Project | | | | | | | Surface Z | Ground Level | | |
| DIRECTIONAL WELL PLAN | | | | | | | | | | |
| MD* | INC* | AZI* | TVD* | N* | E* | DLS* | V. S.* | MapE* | MapN* | SysTVD* |
| ft | deg | deg | ft | ft | ft | %100ft | ft | ft | ft | ft |
| 3350.00 | 15.20 | 262.1 | 3282.12 | -77.32 | -557.21 | 0.00 | 562.55 | | | |
| 3400.00 | 15.20 | 262.1 | 3330.37 | -79.12 | -570.20 | 0.00 | 575.66 | | | |
| 3450.00 | 15.20 | 262.1 | 3378.62 | -80.92 | -583.18 | 0.00 | 588.77 | | | |
| 3500.00 | 15.20 | 262.1 | 3426.87 | -82.73 | -596.17 | 0.00 | 601.88 | | | |
| 3550.00 | 15.20 | 262.1 | 3475.13 | -84.53 | -609.15 | 0.00 | 614.99 | | | |
| 3600.00 | 15.20 | 262.1 | 3523.38 | -86.33 | -622.14 | 0.00 | 628.10 | | | |
| 3650.00 | 15.20 | 262.1 | 3571.63 | -88.13 | -635.12 | 0.00 | 641.21 | | | |
| 3700.00 | 15.20 | 262.1 | 3619.88 | -89.93 | -648.11 | 0.00 | 654.32 | | | |
| 3750.00 | 15.20 | 262.1 | 3668.13 | -91.73 | -661.09 | 0.00 | 667.43 | | | |
| 3800.00 | 15.20 | 262.1 | 3716.38 | -93.54 | -674.08 | 0.00 | 680.54 | | | |
| 3850.00 | 15.20 | 262.1 | 3764.63 | -95.34 | -687.06 | 0.00 | 693.65 | | | |
| 3900.00 | 15.20 | 262.1 | 3812.88 | -97.14 | -700.05 | 0.00 | 706.75 | | | |
| 3950.00 | 15.20 | 262.1 | 3861.13 | -98.94 | -713.03 | 0.00 | 719.86 | | | |
| 4000.00 | 15.20 | 262.1 | 3909.38 | -100.74 | -726.02 | 0.00 | 732.97 | | | |
| 4050.00 | 15.20 | 262.1 | 3957.63 | -102.55 | -739.00 | 0.00 | 746.08 | | | |
| 4100.00 | 15.20 | 262.1 | 4005.88 | -104.35 | -751.99 | 0.00 | 759.19 | | | |
| *** START DROP (at MD = 4106.00) | | | | | | | | | | |
| 4106.00 | 15.20 | 262.1 | 4011.67 | -104.56 | -753.55 | 0.00 | 760.77 | | | |
| 4150.00 | 14.76 | 262.1 | 4054.18 | -106.13 | -764.81 | 1.00 | 772.14 | | | |
| 4200.00 | 14.26 | 262.1 | 4102.58 | -107.85 | -777.22 | 1.00 | 784.67 | | | |
| 4250.00 | 13.76 | 262.1 | 4151.10 | -109.51 | -789.21 | 1.00 | 796.77 | | | |
| 4300.00 | 13.26 | 262.1 | 4199.71 | -111.12 | -800.78 | 1.00 | 808.45 | | | |
| 4350.00 | 12.76 | 262.1 | 4248.43 | -112.66 | -811.93 | 1.00 | 819.71 | | | |
| 4400.00 | 12.26 | 262.1 | 4297.24 | -114.15 | -822.66 | 1.00 | 830.54 | | | |
| 4450.00 | 11.76 | 262.1 | 4346.15 | -115.58 | -832.96 | 1.00 | 840.94 | | | |
| 4500.00 | 11.26 | 262.1 | 4395.14 | -116.95 | -842.84 | 1.00 | 850.92 | | | |
| 4550.00 | 10.76 | 262.1 | 4444.22 | -118.27 | -852.30 | 1.00 | 860.47 | | | |
| 4600.00 | 10.26 | 262.1 | 4493.38 | -119.52 | -861.34 | 1.00 | 869.59 | | | |
| 4650.00 | 9.76 | 262.1 | 4542.62 | -120.71 | -869.94 | 1.00 | 878.28 | | | |
| 4700.00 | 9.26 | 262.1 | 4591.93 | -121.85 | -878.13 | 1.00 | 886.54 | | | |
| 4750.00 | 8.76 | 262.1 | 4641.32 | -122.93 | -885.88 | 1.00 | 894.37 | | | |
| 4800.00 | 8.26 | 262.1 | 4690.77 | -123.94 | -893.21 | 1.00 | 901.77 | | | |
| 4850.00 | 7.76 | 262.1 | 4740.28 | -124.90 | -900.11 | 1.00 | 908.74 | | | |
| 4900.00 | 7.26 | 262.1 | 4789.85 | -125.80 | -906.59 | 1.00 | 915.27 | | | |
| 4950.00 | 6.76 | 262.1 | 4839.48 | -126.64 | -912.63 | 1.00 | 921.37 | | | |

12-04-E4, Plan 1

| 12-04-E4, Plan 1 | | | | | | | | | | | |
|--|--------------------|--------------------|-------------------|---|-----------------|------------------------|---------------------|---|--------------------|----------------------|--|
| Operator Petroglyph Field Well Name 12-04-E4 Plan 1 | | | | Units feet, %/100ft County Duchesne State UT Country USA | | | | 11:11 Thursday, October 18, 2012 Page 4 of 4 Vertical Section Azimuth 262.1 Survey Calculation Method Minimum Curvature Database Access | | | |
| Location 535' FNL 1556' FWL 12-5s-4w Site Slot Name Well Number Project | | | | MapZone SurfaceX SurfaceY Z Datum Surface Z | | | | Lat Long Ref Surface Long Surface Lat Ground Level | | | |
| DIRECTIONAL WELL PLAN | | | | | | | | | | | |
| MD* ft | INC* deg | AZI* deg | TVD* ft | N* ft | E* ft | DLS* %/100ft | V. S.* ft | MapE* ft | MapN* ft | SysTVD* ft | |
| 5000.00 | 6.26 | 262.1 | 4889.15 | -127.42 | -918.24 | 1.00 | 927.04 | | | | |
| 5050.00 | 5.76 | 262.1 | 4938.88 | -128.14 | -923.43 | 1.00 | 932.28 | | | | |
| 5100.00 | 5.26 | 262.1 | 4988.65 | -128.80 | -928.19 | 1.00 | 937.08 | | | | |
| 5150.00 | 4.76 | 262.1 | 5038.46 | -129.40 | -932.51 | 1.00 | 941.45 | | | | |
| 5200.00 | 4.26 | 262.1 | 5088.30 | -129.94 | -936.40 | 1.00 | 945.38 | | | | |
| 5250.00 | 3.76 | 262.1 | 5138.18 | -130.42 | -939.87 | 1.00 | 948.87 | | | | |
| 5300.00 | 3.26 | 262.1 | 5188.08 | -130.84 | -942.90 | 1.00 | 951.93 | | | | |
| 5350.00 | 2.76 | 262.1 | 5238.01 | -131.20 | -945.50 | 1.00 | 954.56 | | | | |
| 5400.00 | 2.26 | 262.1 | 5287.97 | -131.50 | -947.67 | 1.00 | 956.75 | | | | |
| 5450.00 | 1.76 | 262.1 | 5337.94 | -131.74 | -949.41 | 1.00 | 958.50 | | | | |
| 5500.00 | 1.26 | 262.1 | 5387.92 | -131.92 | -950.71 | 1.00 | 959.82 | | | | |
| 5550.00 | 0.76 | 262.1 | 5437.91 | -132.04 | -951.58 | 1.00 | 960.70 | | | | |
| 5600.00 | 0.26 | 262.1 | 5487.91 | -132.10 | -952.03 | 1.00 | 961.15 | | | | |
| *** END DROP (at MD = 5626.00) | | | | | | | | | | | |
| 5626.00 | 0.00 | 0.0 | 5513.91 | -132.11 | -952.08 | 1.00 | 961.21 | | | | |
| 5650.00 | 0.00 | 0.0 | 5537.91 | -132.11 | -952.08 | 0.00 | 961.21 | | | | |
| 5700.00 | 0.00 | 0.0 | 5587.91 | -132.11 | -952.08 | 0.00 | 961.21 | | | | |
| 5750.00 | 0.00 | 0.0 | 5637.91 | -132.11 | -952.08 | 0.00 | 961.21 | | | | |
| 5800.00 | 0.00 | 0.0 | 5687.91 | -132.11 | -952.08 | 0.00 | 961.21 | | | | |
| 5850.00 | 0.00 | 0.0 | 5737.91 | -132.11 | -952.08 | 0.00 | 961.21 | | | | |
| 5900.00 | 0.00 | 0.0 | 5787.91 | -132.11 | -952.08 | 0.00 | 961.21 | | | | |
| 5950.00 | 0.00 | 0.0 | 5837.91 | -132.11 | -952.08 | 0.00 | 961.21 | | | | |
| 6000.00 | 0.00 | 0.0 | 5887.91 | -132.11 | -952.08 | 0.00 | 961.21 | | | | |
| 6050.00 | 0.00 | 0.0 | 5937.91 | -132.11 | -952.08 | 0.00 | 961.21 | | | | |
| 6100.00 | 0.00 | 0.0 | 5987.91 | -132.11 | -952.08 | 0.00 | 961.21 | | | | |
| *** RTD (at MD = 6139.00) | | | | | | | | | | | |
| 6139.00 | 0.00 | 0.0 | 6026.91 | -132.11 | -952.08 | 0.00 | 961.21 | | | | |





PETROGLYPH OPERATING CO., INC.
P.O. BOX 607
ROOSEVELT, UTAH 84066

November 2, 2012

Ms. Diana Mason
State of Utah
Division of Oil, Gas & Mining
1594 West North Temple, Suite 1210
P.O. Box 145801
Salt Lake City, UT 84114-5801

Re: Directional Drilling R649-3-11

Ute Tribal 12-04-E4: 535' FNL & 1556' FWL, NE/4NW/4, SEC. 12, (Surface Hole)
660' FNL & 660' FWL, NW/4NW/4, Sec. 12, (Bottom Hole)
T5S, R4W, U.S.B.&M., Duchesne County, Utah

Dear Ms. Mason,

Pursuant to the filing of Petroglyph Operating Co., Inc.'s Application for Permit to Drill regarding the above referenced well on November 2, 2012, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- The Ute Tribal 08-02-D4 is located within the Antelope Creek Unit Area.
- Petroglyph Operating Co., Inc. is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and drilling directionally from this location, Petroglyph Operating Co., Inc. will be able to utilize the existing road and pipelines in the area.
- Furthermore, Petroglyph Operating Co., Inc. hereby certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

Therefore, based on the above stated information, Petroglyph Operating Co., Inc. requests the permit be granted pursuant to R649-3-11.

Respectfully Submitted,

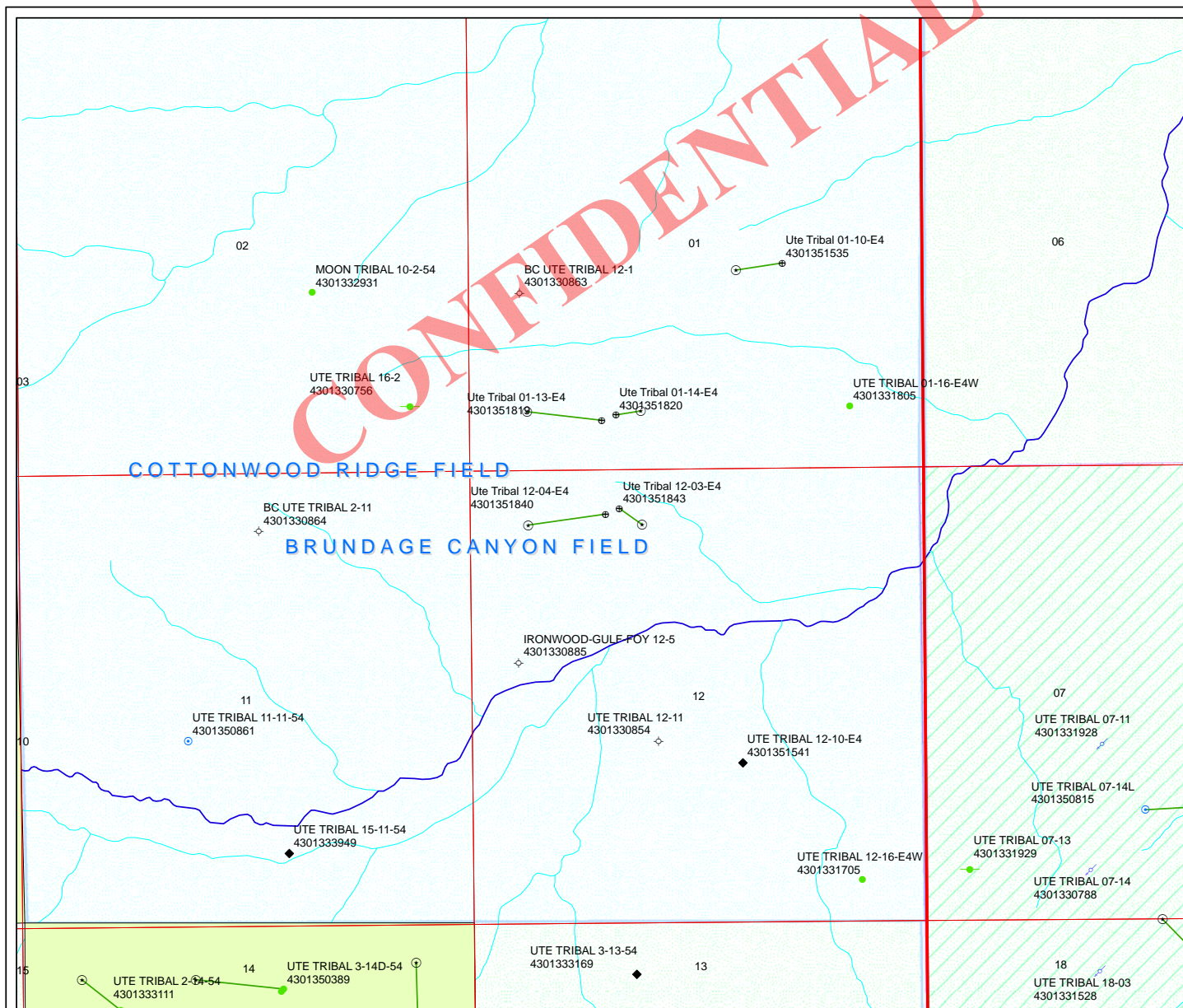
Ed Trotter,
Agent
P.O. Box 1910
Vernal, UT 84078
Phone: (435)789-4120
Fax: (435)789-1420
E-mail: edtrotter@easilink.com

Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions that presently exist; that the statements made in the Plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Petroglyph Operating Co., Inc. and its contractors and subcontractors in conformity with this Plan and the terms and conditions under which it is approved.

Please be advised that Petroglyph Operating Co., Inc. is considered to be the operator of the **UTE TRIBAL 12-04-E4 Well, located in NE/NW of Section 12, T5S, R4W, Duchesne County, Utah, lease #14-20-H62-4744;** and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond Coverage is provided under Bond #LPM4138153.

CONFIDENTIAL



API Number: 4301351840

Well Name: Ute Tribal 12-04-E4

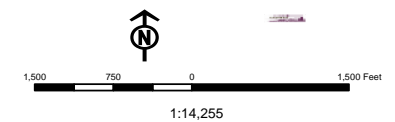
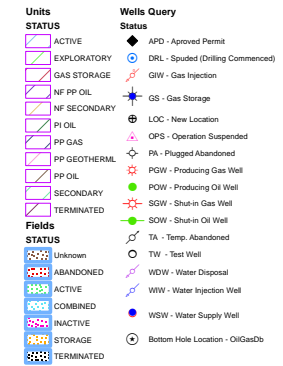
Township T05.0S Range R04.0W Section 12

Meridian: UBM

Operator: PETROGLYPH OPERATING CO

Map Prepared:

Map Produced by Diana Mason



ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator PETROGLYPH OPERATING CO
Well Name Ute Tribal 12-04-E4
API Number 43013518400000 **APD No** 7085 **Field/Unit** BRUNDAGE CANYON
Location: 1/4,1/4 NENW **Sec** 12 **Tw** 5.0S **Rng** 4.0W 535 FNL 1556 FWL
GPS Coord (UTM) 560686 4435403 **Surface Owner** Petroglyph Operating Co., Inc.

Participants

Rodrigo Jurado & Les Farnsworth (Petroglyph Operating and landowner); Ed Trotter (Land Agent); Bill Civish (BLM); Dennis Ingram (Utah Division of Oil, Gas & Mining)

Regional/Local Setting & Topography

The Ute Tribal 12-03-E4 and 12-04-E4 are both proposed on connected locations as directional wells that target the NE/NW and the NW/NW of Section 12, Township 5 South, Range 4 West. This pad is in northeastern Utah on the southern boundary of the Uintah Basin, approximately 9.0 miles south/southwest of the Bridgeland/U.S. Highway 40 junction, along the Antelope Canyon road one mile south of the Antelope/Sowers Canyon Junction. Broad, bench like habitat slopes north from Anthro Mountain into the Uintah Basin, having the lowest elevation at the Duchesne River. These broad benches have numerous drainages that drain the high country northerly, with Sowers Canyon being one of the primary arteries. This well pad is positioned approximately 0.3 miles west of Sowers Canyon along its western rims, in rolling hills with sparse cedar tree habitat and short, desert-like sagebrush country, on a fingered northeast sloping ridge that drops into the canyon below. The greatest cut for the well pad is along the northern portion of the pad, with a shallow draw draining northeasterly; other drainages to the west near the location edge that drains away from the lease.

Surface Use Plan

Current Surface Use

Deer Winter Range
Recreational

**New Road
Miles**

0.26

Well Pad

Width 250 **Length** 515

Src Const Material

Onsite

Surface Formation

UNTA

Ancillary Facilities N

Waste Management Plan Adequate?

Environmental Parameters

Affected Floodplains and/or Wetlands N

Flora / Fauna

Sparse vegetation, cedar tree, sagebrush, rabbit brush, bunch grass, prickly pear cactus; mule deer winter range, littered with tracks, elk potential, coyote, rabbit, fox, raptor nest in area, no details.

Soil Type and Characteristics

Tan, fine-grained, sandy loam with some clays and shales present

Erosion Issues N

Sedimentation Issues N

Site Stability Issues N

Drainage Diversion Required? Y

Re-route any drainages around location

Berm Required? Y

Erosion Sedimentation Control Required? N

Paleo Survey Run? Y **Paleo Potential Observed?** N **Cultural Survey Run?** Y **Cultural Resources?** N

Reserve Pit

Site-Specific Factors

Site Ranking

| | | |
|--|------------------|---------------------------|
| Distance to Groundwater (feet) | >200 | 0 |
| Distance to Surface Water (feet) | 300 to 1000 | 2 |
| Dist. Nearest Municipal Well (ft) | >5280 | 0 |
| Distance to Other Wells (feet) | | 20 |
| Native Soil Type | Mod permeability | 10 |
| Fluid Type | Fresh Water | 5 |
| Drill Cuttings | Normal Rock | 0 |
| Annual Precipitation (inches) | | 0 |
| Affected Populations | | |
| Presence Nearby Utility Conduits | Not Present | 0 |
| Final Score | | 37 1 Sensitivity Level |

Characteristics / Requirements

Two reserve pits positioned immediately off the north side of location in cut, each measuring 60' wide by 110' long by 8' deep while the area shows prevailing winds from the west.

Closed Loop Mud Required? **Liner Required?** Y **Liner Thickness** 16 **Pit Underlayment Required?**

Other Observations / Comments

Surface purchased by Petroglyph Operating, no issues.

Dennis Ingram
Evaluator

11/27/2012
Date / Time

Application for Permit to Drill Statement of Basis Utah Division of Oil, Gas and Mining

| APD No | API WellNo | Status | Well Type | Surf Owner | CBM |
|-----------|---|--------|-------------------|--------------------------------|-----|
| 7085 | 43013518400000 | LOCKED | OW | P | No |
| Operator | PETROGLYPH OPERATING CO | | Surface Owner-APD | Petroglyph Operating Co., Inc. | |
| Well Name | Ute Tribal 12-04-E4 | | Unit | | |
| Field | BRUNDAGE CANYON | | Type of Work | DRILL | |
| Location | NENW 12 5S 4W U 535 FNL (UTM) 560699E 4435417N | | 1556 FWL | GPS Coord | |

Geologic Statement of Basis

The mineral rights for the proposed well are owned by the Ute Tribe. The BLM will be the agency responsible for evaluating and approving the drilling, casing and cement programs.

Brad Hill
APD Evaluator

12/10/2012
Date / Time

Surface Statement of Basis

A presite visit was scheduled and done on Tuesday, November 27, 2012 to take input and address issues regarding the drilling and construction of the Ute Tribal 12-03-E4 and the 12-04-E4 wells on a multi-well pad. Petroglyph Operating is shown as the landowner of record and was therefore invited to the presite. Rodrigo Jurado came along and represented the landowner interests, and they obviously have a landowner agreement.

Two reserve pits are proposed on this extended, multi-well pad just north of the surface. Both reserve pits are staked immediately off the northern side of the location in cut and provide no issues on stability. However, both pits shall be lined with a minimum 16 mil synthetic liner and a pad if necessary to prevent seepage.

A long, shallow draw drains northerly just north of the location and doesn't provide any issues. Two shallow drainages do head up and begin near the center the location and drain the existing surface to the southeast. Another shallow drainage begins on the western portion of the pad and drains to the west, although none of them should propose a problem once the location is constructed. Both reserve pits shall be prepared for a liner and have a 16 mil or thicker synthetic liner install before the drilling process starts.

The BLM did make note of an existing hawk nest in the area but did not have any details as to how far, or when the nest was last utilized.

Dennis Ingram
Onsite Evaluator

11/27/2012
Date / Time

Conditions of Approval / Application for Permit to Drill

| Category | Condition |
|----------|---|
| Pits | A synthetic liner with a minimum thickness of 16 mils shall be properly installed and maintained in all reserve pits. |
| Pits | The reserve pit should be located on the north side of the location. |
| Surface | Drainages adjacent to the proposed pad shall be diverted around the location. |

API Well Number: 43013518400000

Surface

The well site shall be bermed to prevent fluids from leaving the pad.

CONFIDENTIAL

RECEIVED: December 11, 2012

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 11/2/2012

API NO. ASSIGNED: 43013518400000

WELL NAME: Ute Tribal 12-04-E4

OPERATOR: PETROGLYPH OPERATING CO (N3800)

PHONE NUMBER: 435 789-4120

CONTACT: Ed Trotter

PROPOSED LOCATION: NENW 12 050S 040W

Permit Tech Review: ☒

SURFACE: 0535 FNL 1556 FWL

Engineering Review: ☐

BOTTOM: 0660 FNL 0660 FWL

Geology Review: ☒

COUNTY: DUCHESNE

LATITUDE: 40.06683

LONGITUDE: -110.28821

UTM SURF EASTINGS: 560699.00

NORTHINGS: 4435417.00

FIELD NAME: BRUNDAGE CANYON

LEASE TYPE: 2 - Indian

LEASE NUMBER: 1420H624744

PROPOSED PRODUCING FORMATION(S): GREEN RIVER

SURFACE OWNER: 4 - Fee

COALBED METHANE: NO

RECEIVED AND/OR REVIEWED:

☒ PLAT☒ Bond: STATE/FEE - LPM4138153☐ Potash☐ Oil Shale 190-5☐ Oil Shale 190-3☐ Oil Shale 190-13☒ Water Permit: 43-8342☐ RDCC Review:☒ Fee Surface Agreement☐ Intent to Commingle

Commingle Approved

LOCATION AND SITING:

☐ R649-2-3.

Unit:

☐ R649-3-2. General☒ R649-3-3. Exception☒ Drilling Unit

Board Cause No: R649-3-11

Effective Date:

Siting:

☒ R649-3-11. Directional Drill

Comments: Presite Completed

Stipulations: 1 - Exception Location - bhll
4 - Federal Approval - dmason
5 - Statement of Basis - bhll
15 - Directional - dmason
23 - Spacing - dmason

RECEIVED: December 11, 2012



GARY R. HERBERT
Governor

GREGORY S. BELL
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: Ute Tribal 12-04-E4

API Well Number: 43013518400000

Lease Number: 1420H624744

Surface Owner: FEE (PRIVATE)

Approval Date: 12/11/2012

Issued to:

PETROGLYPH OPERATING CO, 960 Broadway Avenue, Ste 500, Bosie, ID 83703

Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of R649-3-11. The expected producing formation or pool is the GREEN RIVER Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

Exception Location:

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled,

completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Additional Approvals:

The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan - contact Dustin Doucet
- Significant plug back of the well - contact Dustin Doucet
- Plug and abandonment of the well - contact Dustin Doucet

Notification Requirements:

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well - contact Carol Daniels
OR
submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website
at <http://oilgas.ogm.utah.gov>
- 24 hours prior to testing blowout prevention equipment - contact Dan Jarvis
- 24 hours prior to cementing or testing casing - contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program
- contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well - contact Dan Jarvis

Contact Information:

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 - office
- Dustin Doucet 801-538-5281 - office
801-733-0983 - after office hours
- Dan Jarvis 801-538-5338 - office
801-231-8956 - after office hours

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) - due within 5 days of spudding the well
- Monthly Status Report (Form 9) - due by 5th day of the following calendar month

- Requests to Change Plans (Form 9) - due prior to implementation
- Written Notice of Emergency Changes (Form 9) - due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) - due prior to implementation
- Report of Water Encountered (Form 7) - due within 30 days after completion
- Well Completion Report (Form 8) - due within 30 days after completion or plugging

Approved By:

A handwritten signature in black ink, appearing to read "J. Rogers", written over a horizontal line.

For John Rogers
Associate Director, Oil & Gas

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

NOV 13 2012

FORM APPROVED
OMB No. 1004-0136
Expires July 31, 2010

APPLICATION FOR PERMIT TO DRILL OR REENTER

BLM

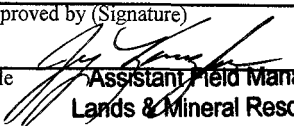
CONFIDENTIAL

| | | |
|---|---|--|
| 1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER | | 5. Lease Serial No. 1420H624744 |
| 1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone | | 6. If Indian, Allottee or Tribe Name UINTAH AND OURAY |
| 2. Name of Operator PETROGLYPH OPERATING CO INC Contact: ED H TROTTER Email: edtrotter@easilink.com | | 7. If Unit or CA Agreement, Name and No. |
| 3a. Address ROOSEVELT, UT 84066 | 3b. Phone No. (include area code) Ph: 435-789-4120 Fx: 435-789-1420 | 8. Lease Name and Well No. UTE TRIBAL 12-04-E4 |
| 4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NENW 535FNL 1556FWL 40.066697 N Lat, 110.288336 W Lon At proposed prod. zone NWNW 660FNL 660FWL 40.066367 N Lat, 110.291539 W Lon | | 9. API Well No. 43013 51840 |
| 14. Distance in miles and direction from nearest town or post office* 16.89 MILES SOUTHWEST OF MYTON, UTAH | | 10. Field and Pool, or Exploratory UNDESIGNATED |
| 15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 469 | 16. No. of Acres in Lease 480.00 | 11. Sec., T., R., M., or Blk. and Survey or Area Sec 12 T5S R4W Mer UBM SME: FEE |
| 18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 2142 | 19. Proposed Depth 6139 MD 6026 TVD | 12. County or Parish DUCHESNE |
| 21. Elevations (Show whether DF, KB, RT, GL, etc.) 5968 GL | 22. Approximate date work will start 01/15/2013 | 13. State UT |
| | | 17. Spacing Unit dedicated to this well |
| | | 20. BLM/BIA Bond No. on file LPM4138335 |
| | | 23. Estimated duration 45 DAYS |

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

| | | |
|--|--|---------------------|
| 25. Signature (Electronic Submission) | Name (Printed/Typed) LESTER FARNSWORTH Ph: 435-722-2531 | Date 11/02/2012 |
| Title DISTRICT MANAGER | | |
| Approved by (Signature)  | Name (Printed/Typed) Jerry Kenczka | Date FEB 11 2013 |
| Title Assistant Field Manager Lands & Mineral Resources | Office VERNAL FIELD OFFICE | |

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Additional Operator Remarks (see next page)

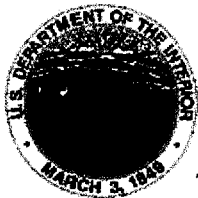
Electronic Submission #157722 verified by the BLM Well Information System
For PETROGLYPH OPERATING CO INC, sent to the Vernal

Committed to AFMSS for processing by JOHNETTA MAGEE on 11/13/2012 (13JM0787AE) DIV OF OIL, GAS & MINING

NOTICE OF APPROVAL

UDOGM

** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **



UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VERNAL FIELD OFFICE

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: PETROGLYPH OPERATING CO INC
Well No: UTE TRIBAL 12-04-E4
API No: 43-013-51840

Location: NENW, Sec. 12, T5S, R4W
Lease No: 14-20-H62-4744
Agreement: N/A

OFFICE NUMBER: (435) 781-4400

OFFICE FAX NUMBER: (435) 781-3420

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

NOTIFICATION REQUIREMENTS

| | |
|---|--|
| Construction Activity (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist) | - The Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist shall be notified at least 48 hours in advance of any construction activity. The Ute Tribal office is open Monday through Thursday. |
| Construction Completion (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist) | - Upon completion of the pertinent APD/ROW construction, notify the Ute Tribe Energy & Minerals Dept. for a Tribal Technician to verify the Affidavit of Completion. Notify the BLM Environmental Scientist prior to moving on the drilling rig. |
| Spud Notice (Notify BLM Petroleum Engineer) | - Twenty-Four (24) hours prior to spudding the well. |
| Casing String & Cementing (Notify BLM Supv. Petroleum Tech.) | - Twenty-Four (24) hours prior to running casing and cementing all casing strings to: blm_ut_vn_opreport@blm.gov . |
| BOP & Related Equipment Tests (Notify BLM Supv. Petroleum Tech.) | - Twenty-Four (24) hours prior to initiating pressure tests. |
| First Production Notice (Notify BLM Petroleum Engineer) | - Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days. |

***SURFACE USE PROGRAM
CONDITIONS OF APPROVAL (COAs)***

• **CONDITIONS OF APPROVAL:**

- Any deviation of submitted APD's, which includes Petroglyph's surface use plan, and the operator will notify the BLM in writing and will receive written authorization of any such change with appropriate authorization.
- All operator employees and/or authorized personnel (sub-contractors) in the field will have approved applicable APD's, and COA authorizations on their person(s) during all phases of construction.
- All vehicular traffic, personnel movement, construction/restoration operations should be confined to the area examined and approved, and to the existing roadways and/or evaluated access routes.
- All personnel will refrain from collecting artifacts, any paleontological fossils, and from disturbing any significant cultural resources in the area.
- The personnel from the BLM will be notified should cultural remains from subsurface deposits be exposed or identified during construction. All construction will cease until resources can be identified and protected properly.
- Production facilities would be painted Beetle for the 12-04-E4 and Covert Green for 01-13-E4 and 01-14E4 to blend in with the surrounding habitat, unless otherwise stated from the private land owner agreement.
- Site reclamation would be accomplished for portions of the well pad not needed for production, within 6 months of completion, weather permitting. This also includes any roads, and pipeline areas that have been disturbed as well. Roads and pipeline disturbances can undergo reclamation immediately after the pipeline is installed and after the roads are built. Please contact surface owner or the BLM AO for possible seed mixes to use in the project area. Non-natives can be used; however lbs/ac must be kept low to minimize the chance of a monoculture.
- The pad locations will be recontoured and planted in native vegetation as per the land owner's request.

**DOWNHOLE PROGRAM
CONDITIONS OF APPROVAL (COAs)**

SITE SPECIFIC DOWNHOLE COAs:

- Gamma Ray Log shall be run from Total Depth to Surface
- CBL will be run from TD to TOC
- Cement for the surface casing will be circulated to the surface
- Cement for long-string shall be circulated 200' above surface casing shoe.

Variances Granted

- Variance for Air-drilling is granted per APD

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**

- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well by CD (compact disc). This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
 - Operator name, address, and telephone number.
 - Well name and number.
 - Well location (¼¼, Sec., Twn, Rng, and P.M.).
 - Date well was placed in a producing status (date of first production for which royalty will be paid).
 - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
 - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
 - Unit agreement and/or participating area name and number, if applicable.
 - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if

performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

| | | |
|---|---|--|
| STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING | | FORM 9 |
| SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | | 5. LEASE DESIGNATION AND SERIAL NUMBER: 1420H624744 |
| 1. TYPE OF WELL Oil Well | | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: |
| 2. NAME OF OPERATOR: PETROGLYPH OPERATING CO | | 7. UNIT or CA AGREEMENT NAME: |
| 3. ADDRESS OF OPERATOR: 960 Broadway Avenue, Ste 500 , Boise, ID, 83703 | | 8. WELL NAME and NUMBER: Ute Tribal 12-04-E4 |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: 0535 FNL 1556 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 12 Township: 05.0S Range: 04.0W Meridian: U | | 9. API NUMBER: 43013518400000 |
| PHONE NUMBER: 208 685-7685 Ext | | 9. FIELD and POOL or WILDCAT: BRUNDAGE CANYON |
| COUNTY: DUCHESNE | | STATE: UTAH |
| 11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA | | |
| TYPE OF SUBMISSION | TYPE OF ACTION | |
| <input type="checkbox"/> NOTICE OF INTENT Approximate date work will start: <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 3/19/2012 <input type="checkbox"/> DRILLING REPORT Report Date: | <div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> <input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION </div> <div style="width: 33%;"> <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER </div> <div style="width: 33%;"> <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100%;" type="text"/> </div> </div> | |
| 12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. We spudded the Ute Tribal 12-04-E4 on 3/19/2012 at approximately 1:00 P.M. using a Bucket Rig provided by Craig's Roustabout Service. We set 40' of 16' conductor. For additional information please contact Rodrigo Jurado at (435)722-5302. | | |
| NAME (PLEASE PRINT) Rodrigo Jurado | | PHONE NUMBER 435 722-5302 |
| SIGNATURE N/A | | TITLE Regulatory & Compliance Spc |
| DATE 3/20/2013 | | <div style="text-align: center;"> Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY March 21, 2013 </div> |

CONFIDENTIAL

BLM - Vernal Field Office - Notification Form

Operator Petroglyph Operating Rig Name/# ProPetro/Air Rig
Submitted By Rodrigo Jurado Phone Number 435-722-5302
Well Name/Number Ute Tribal 12-04-E4
Qtr/Qtr NENW Section 12 Township 5S Range 4W
Lease Serial Number 14-20-H62-4744
API Number 43-013-51840

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time _____ AM ☐ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☒ Surface Casing
☐ Intermediate Casing
☐ Production Casing
☐ Liner
☐ Other

Date/Time 3/26/2013 6:00 AM ☐ PM ☒

BOPE

- ☐ Initial BOPE test at surface casing point
☐ BOPE test at intermediate casing point
☐ 30 day BOPE test
☐ Other

RECEIVED

MAR 29 2013

DIV. OF OIL, GAS & MINING

Date/Time _____ AM ☐ PM ☐

Remarks We intend to run +/- 500' of 8-5/8" J-55 Casing at the time indicated. (Sent 3/25/2013 @ 12:30P.M.)

CONFIDENTIAL

BLM - Vernal Field Office - Notification Form

Operator Petroglyph Operating Rig Name/# ProPetro/Air Rig
Submitted By Rodrigo Jurado Phone Number 435-722-5302
Well Name/Number Ute Tribal 12-04-E4
Qtr/Qtr NENW Section 12 Township 5S Range 4W
Lease Serial Number 14-20-H62-4744
API Number 43-013-51840

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time 3/19/2013 10:00 AM ☒ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☐ Surface Casing
- ☐ Intermediate Casing
- ☐ Production Casing
- ☐ Liner
- ☐ Other

Date/Time _____ AM ☐ PM ☐

BOPE

- ☐ Initial BOPE test at surface casing point
- ☐ BOPE test at intermediate casing point
- ☐ 30 day BOPE test
- ☐ Other

RECEIVED

MAR 19 2013

DIV. OF OIL, GAS & MINING

Date/Time _____ AM ☐ PM ☐

Remarks We intend to spud this well at the time indicated. We plan to set 40' of 16" Conductor. (Sent 3/18/2013 @ 10:30A.M.)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 6

ENTITY ACTION FORM

Operator: Petroglyph Operating Company Operator Account Number: N 3800
Address: P.O. Box 607
city Roosevelt
state UT zip 84066 Phone Number: (435) 722-2531

Well 1

| API Number | Well Name | | QQ | Sec | Twp | Rng | County |
|---|-----------------------|-------------------|-----------|-----|-----|----------------------------------|----------|
| 4301351840 | Ute Tribal 12-04-E4 | | NENW | 12 | 5S | 4W | Duchesne |
| Action Code | Current Entity Number | New Entity Number | Spud Date | | | Entity Assignment Effective Date | |
| B | ✓ 99999 | 18870 | 3/19/2013 | | | 28-Mar-2013 | |
| Comments: Please add to existing 01-14-E4 Tank Battery. <i>GRRV</i> | | | | | | | |

CONFIDENTIAL

Well 2

| API Number | Well Name | | QQ | Sec | Twp | Rng | County |
|------------------|-----------------------|-------------------|-----------|-----|-----|----------------------------------|--------|
| | | | | | | | |
| Action Code | Current Entity Number | New Entity Number | Spud Date | | | Entity Assignment Effective Date | |
| | | | | | | | |
| Comments: | | | | | | | |

Well 3

| API Number | Well Name | | QQ | Sec | Twp | Rng | County |
|------------------|-----------------------|-------------------|-----------|-----|-----|----------------------------------|--------|
| | | | | | | | |
| Action Code | Current Entity Number | New Entity Number | Spud Date | | | Entity Assignment Effective Date | |
| | | | | | | | |
| Comments: | | | | | | | |

ACTION CODES:

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

Rodrigo Jurado

Name (Please Print)

Signature

Regulatory Compliance Spc

Title

3/25/2013

Date

RECEIVED

MAR 25 2013

Div. of Oil, Gas & Mining

CONFIDENTIAL

Print Form

BLM - Vernal Field Office - Notification Form

Operator Petroglyph Operating Rig Name/# Aztec # 673
Submitted By Kenny Gray Phone Number 970-361-3271
Well Name/Number Ute Tribal 12-04-E4
Qtr/Qtr NENW Section 12 Township 5S Range 4W
Lease Serial Number 14-20-H62-4744
API Number 43-013-51840

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time _____ AM ☐ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☐ Surface Casing
- ☐ Intermediate Casing
- ☐ Production Casing
- ☐ Liner
- ☐ Other

RECEIVED

APR 18 2013

DIV. OF OIL, GAS & MINING

Date/Time _____ AM ☐ PM ☐

BOPE

- ☒ Initial BOPE test at surface casing point
- ☐ BOPE test at intermediate casing point
- ☐ 30 day BOPE test
- ☐ Other

Date/Time 04/19/2013 10:00 AM ☒ PM ☐

Remarks _____

| | | | | | |
|--|---|---|---|--|---|
| STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING | | FORM 9 | | | |
| SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | | 5. LEASE DESIGNATION AND SERIAL NUMBER: 1420H624744 | | | |
| 1. TYPE OF WELL Oil Well | | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: | | | |
| 2. NAME OF OPERATOR: PETROGLYPH OPERATING CO | | 7. UNIT or CA AGREEMENT NAME: | | | |
| 3. ADDRESS OF OPERATOR: 960 Broadway Avenue, Ste 500, Boise, ID, 83703 | | 8. WELL NAME and NUMBER: Ute Tribal 12-04-E4 | | | |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: 0535 FNL 1556 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 12 Township: 05.0S Range: 04.0W Meridian: U | | 9. API NUMBER: 43013518400000 | | | |
| 5. FIELD and POOL or WILDCAT: BRUNDAGE CANYON | | 6. COUNTY: DUCHESNE | | | |
| 7. STATE: UTAH | | | | | |
| 11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA | | | | | |
| TYPE OF SUBMISSION | TYPE OF ACTION | | | | |
| <input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 5/14/2013 <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date: | <table style="width: 100%; border: none;"> <tr> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input checked="" type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/> </td> </tr> </table> | | <input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION | <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input checked="" type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER | <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/> |
| <input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION | <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input checked="" type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER | <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/> | | | |
| 12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. <div style="display: flex; justify-content: space-between;"> <div style="width: 70%;"> <p>On or about the date referenced above, depending on equipment availability, Petroglyph Operating Company intends to perforate and fracture treat the well referenced above. We intend to perforate using Titan 3-1/8" perf guns containing 22.7 gram charges, 0.42" EHD, 23.54" TTP @ 4 spf @ 4 120* phased. We intend to isolate zones using Halliburton 8K Composite Plugs and fracture treat using Dyna HT 25 15# gelled fluid containing 20/40 Mesh Sand. We intend to perforate the following: 3864-66 3873.5-3876.5 3881-84 3904-06 3980-83 4313-25 4394-96 4536-44 4552-54 4606-10 4732-38 4880-85 4893-4909 4998-5000 5054-67 5071-78 5192-99 5239-42 5250-54 5256-58 5264-66 5282-86 5339-41 5510-19 5521-28 5566-70 5673-83 5793-96 5808-14 5820-26 5906-08 5964-66 5970-76 5988-91 5995-97 6008-12 6026-28 6077-81. All plugs will be drilled out and cleaned out, well will be swabbed, pump ran and put to prod,</p> </div> <div style="width: 25%; text-align: right;"> <p>Accepted by the Utah Division of Oil, Gas and Mining</p> <p>Date: May 07, 2013</p> <p>By: <u><i>Derek Quist</i></u></p> </div> </div> | | | | | |
| NAME (PLEASE PRINT) Rodrigo Jurado | | PHONE NUMBER 435 722-5302 | | | |
| SIGNATURE N/A | | TITLE Regulatory & Compliance Spc | | | |
| DATE 5/7/2013 | | | | | |

| | | |
|--|--|--|
| STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING | | FORM 9 |
| SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | | 5. LEASE DESIGNATION AND SERIAL NUMBER: 1420H624744 |
| | | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: |
| | | 7. UNIT or CA AGREEMENT NAME: |
| 1. TYPE OF WELL Oil Well | | 8. WELL NAME and NUMBER: Ute Tribal 12-04-E4 |
| 2. NAME OF OPERATOR: PETROGLYPH OPERATING CO | | 9. API NUMBER: 43013518400000 |
| 3. ADDRESS OF OPERATOR: 960 Broadway Avenue, Ste 500, Boise, ID, 83703 | | 9. FIELD and POOL or WILDCAT: BRUNDAGE CANYON |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: 0535 FNL 1556 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 12 Township: 05.0S Range: 04.0W Meridian: U | | COUNTY: DUCHESNE |
| | | STATE: UTAH |

11.

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| TYPE OF SUBMISSION | TYPE OF ACTION | | | |
|--|--|---|--|---|
| <input type="checkbox"/> NOTICE OF INTENT Approximate date work will start: | <input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input checked="" type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION | <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER | <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION | OTHER: <input style="width: 100px;" type="text"/> |
| <input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 5/28/2013 | | | | |
| <input type="checkbox"/> SPUD REPORT Date of Spud: | | | | |
| <input type="checkbox"/> DRILLING REPORT Report Date: | | | | |

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The date of first production for this well was 05/28/2013.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 June 07, 2013

| | | |
|---------------------------------------|------------------------------|--------------------------------------|
| NAME (PLEASE PRINT) Rodrigo Jurado | PHONE NUMBER 435 722-5302 | TITLE Regulatory & Compliance Spc |
| SIGNATURE N/A | | DATE 5/30/2013 |

| | | |
|--|--|--|
| STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING | | FORM 9 |
| | | 5. LEASE DESIGNATION AND SERIAL NUMBER: 1420H624744 |
| SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. | | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: |
| | | 7. UNIT or CA AGREEMENT NAME: |
| 1. TYPE OF WELL Oil Well | | 8. WELL NAME and NUMBER: Ute Tribal 12-04-E4 |
| 2. NAME OF OPERATOR: PETROGLYPH OPERATING CO | | 9. API NUMBER: 43013518400000 |
| 3. ADDRESS OF OPERATOR: 960 Broadway Avenue, Ste 500, Boise, ID, 83703 | | 9. FIELD and POOL or WILDCAT: BRUNDAGE CANYON |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: 0535 FNL 1556 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 12 Township: 05.0S Range: 04.0W Meridian: U | | COUNTY: DUCHESNE |
| | | STATE: UTAH |

11.

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| TYPE OF SUBMISSION | TYPE OF ACTION | | |
|--|---|--|---|
| <input type="checkbox"/> NOTICE OF INTENT Approximate date work will start: | <input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION | <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input checked="" type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER | <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/> |
| <input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 6/5/2013 | | | |
| <input type="checkbox"/> SPUD REPORT Date of Spud: | | | |
| <input type="checkbox"/> DRILLING REPORT Report Date: | | | |

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Please see attached form. Not enough space on this form for necessary information.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 June 20, 2013

| | | |
|---------------------------------------|------------------------------|--------------------------------------|
| NAME (PLEASE PRINT) Rodrigo Jurado | PHONE NUMBER 435 722-5302 | TITLE Regulatory & Compliance Spc |
| SIGNATURE N/A | | DATE 6/19/2013 |

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

| | | |
|---|--|---|
| 1. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER _____ | | 5. LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-4744 |
| 2. NAME OF OPERATOR: Petroglyph Operating Company Inc. | | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Indian Tribe |
| 3. ADDRESS OF OPERATOR: P.O. Box 607 CITY Roosevelt STATE UT ZIP 84066 | | 7. UNIT or CA AGREEMENT NAME: 14-20-H62-4650 |
| 4. LOCATION OF WELL FOOTAGES AT SURFACE: 535' FNL, 1556' FWL | | 8. WELL NAME and NUMBER: Ute Tribal 12-04-E4 |
| PHONE NUMBER: (435) 722-2531 | | 9. API NUMBER: 4301351830 |
| QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NENW 12 5S 4W U | | 10. FIELD AND POOL, OR WILDCAT: |
| COUNTY: Duchesne | | STATE: UTAH |

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| TYPE OF SUBMISSION | TYPE OF ACTION | | |
|---|---|---|--|
| <input type="checkbox"/> NOTICE OF INTENT (Submit in Duplicate) Approximate date work will start: _____ | <input type="checkbox"/> ACIDIZE | <input type="checkbox"/> DEEPEN | <input type="checkbox"/> REPERFORATE CURRENT FORMATION |
| | <input type="checkbox"/> ALTER CASING | <input checked="" type="checkbox"/> FRACTURE TREAT | <input type="checkbox"/> SIDETRACK TO REPAIR WELL |
| | <input type="checkbox"/> CASING REPAIR | <input type="checkbox"/> NEW CONSTRUCTION | <input type="checkbox"/> TEMPORARILY ABANDON |
| | <input type="checkbox"/> CHANGE TO PREVIOUS PLANS | <input type="checkbox"/> OPERATOR CHANGE | <input type="checkbox"/> TUBING REPAIR |
| | <input type="checkbox"/> CHANGE TUBING | <input type="checkbox"/> PLUG AND ABANDON | <input type="checkbox"/> VENT OR FLARE |
| <input checked="" type="checkbox"/> SUBSEQUENT REPORT (Submit Original Form Only) Date of work completion: 6/5/2013 | <input type="checkbox"/> CHANGE WELL NAME | <input type="checkbox"/> PLUG BACK | <input type="checkbox"/> WATER DISPOSAL |
| | <input type="checkbox"/> CHANGE WELL STATUS | <input type="checkbox"/> PRODUCTION (START/RESUME) | <input type="checkbox"/> WATER SHUT-OFF |
| | <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS | <input type="checkbox"/> RECLAMATION OF WELL SITE | <input type="checkbox"/> OTHER: _____ |
| | <input type="checkbox"/> CONVERT WELL TYPE | <input type="checkbox"/> RECOMPLETE - DIFFERENT FORMATION | |

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

On 5/3/2013 Petroglyph Operating Company ran GR/CBL and found ETOC @ Surface. On 5/13/2013 we perforated the following: 6077-81, 6026-28, 6008-12, 5995-97, 5988-91, 5970-76, 5964-66, 5906-08, 5820-26, 5808-14, 5793-96, 5673-83, 5566-70, 5521-28, 5510-19, 5339-41, 5289-86, 5264-66, 5256-58, 5250-54, 5239-42, 5192-99, 5071-78, 5054-67, 4998-5000, 4893-4909, 4880-85, 4732-38, 4608-10, 4552-54, 4536-44, 4394-96, 4313-25, 3980-83, 3904-05, 3881-84, 3873-76 & 3864-66. We perforated using Titan 3-1/8" cont 22.7 gram charges, 0.42" EHD, 23.54" TTP @ 4 spf @ 120* phased. Using Halliburton 8K Composite Plugs for isolation we frac'd the following:
 5906-6081: 833 Bbls of 15% Hcl followed by a 139 Bbl fresh water over flush.
 5673-5826: 1248 Bbls of fluid cont 55,000#'s of sand
 5510-5570: 735 Bbls of fluid cont 50,000#'s of sand
 5192-5341: 693 Bbls of fluid cont 37,783#'s of sand
 4998-5078: 715 Bbls of fluid cont 55,020#'s of sand
 4880-4909: 707 Bbls of fluid cont 55,000#'s of sand
 4608-4610: 465 Bbls of fluid cont 18,000#'s of sand
 4536-4544: 544 Bbls of fluid cont 33,000#'s of sand
 4313-4369: 617 Bbls of fluid cont 38,000#'s of sand & 3864-3983: 607 Bbls of fluid cont 188,688#'s of sand.
 We frac'd using Dyna HT25 15# gelled fluid cont 20/40 Mesh Sand. All plugs were drilled out and cleaned out to 6260', PBTD. Well was swabbed until a good oil cut was seen, pump ran and put to pump on 6/5/2013.

| | |
|---|---|
| NAME (PLEASE PRINT) <u>Rodrigo Jurado</u> | TITLE <u>Regulatory Compliance Specialist</u> |
| SIGNATURE  | DATE <u>6/19/2013</u> |

(This space for State use only)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

AMENDED REPORT ☐ FORM 8
(highlight changes)

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

| | | |
|---|--|--|
| 1a. TYPE OF WELL: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER _____ | | 5. LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-4744 |
| b. TYPE OF WORK: NEW WELL <input checked="" type="checkbox"/> HORIZ. LATS. <input type="checkbox"/> DEEP-EN <input type="checkbox"/> RE-ENTRY <input type="checkbox"/> DIFF. RESVR <input type="checkbox"/> OTHER _____ | | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Indian Tribe |
| 2. NAME OF OPERATOR: Petroglyph Operating Company, Inc. | | 7. UNIT or CA AGREEMENT NAME: 14-20-H62-4650 |
| 3. ADDRESS OF OPERATOR: P.O. Box 607 CITY Roosevelt STATE UT ZIP 84066 | | 8. WELL NAME and NUMBER: Ute Tribal 12-04-E4 |
| PHONE NUMBER: (435) 722-2531 | | 9. API NUMBER: 4301351840 |
| 4. LOCATION OF WELL (FOOTAGES): AT SURFACE: 535' FNL 1556' FWL AT TOP PRODUCING INTERVAL REPORTED BELOW: 654' FNL 852' FWL AT TOTAL DEPTH: 711' FNL 610' FWL | | 10. FIELD AND POOL, OR WILDCAT: Antelope Creek |
| | | 11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NENW 12 5W 4W U |
| | | 12. COUNTY: Duchesne |
| | | 13. STATE: UTAH |

| | | | | |
|--|---|--|---|--|
| 14. DATE SPUDED: 3/19/2013 | 15. DATE T.D. REACHED: 4/22/2013 | 16. DATE COMPLETED: 5/28/2013 | ABANDONED <input type="checkbox"/> READY TO PRODUCE <input checked="" type="checkbox"/> | 17. ELEVATIONS (DF, RKB, RT, GL): 5,982' RKB |
| 18. TOTAL DEPTH: MD 6,351 TVD 6,245 | 19. PLUG BACK T.D.: MD 6,260 TVD 6,154 | 20. IF MULTIPLE COMPLETIONS, HOW MANY? * | | 21. DEPTH BRIDGE MD PLUG SET: TVD |
| 22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each) ACTR, SDDSN, Cement Bond Log, Borehole Volume Plot | | | 23. WAS WELL CORED? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit analysis) WAS DST RUN? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit report) DIRECTIONAL SURVEY? NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> (Submit copy) | |

24. CASING AND LINER RECORD (Report all strings set in well)

| HOLE SIZE | SIZE/GRADE | WEIGHT (#/ft.) | TOP (MD) | BOTTOM (MD) | STAGE CEMENTER DEPTH | CEMENT TYPE & NO. OF SACKS | SLURRY VOLUME (BBL) | CEMENT TOP ** | AMOUNT PULLED |
|-----------|------------|----------------|----------|-------------|----------------------|----------------------------|---------------------|---------------|---------------|
| 20 | 16 J-55 | 75 | 0 | 74 | | | | 0 | Conductor |
| 12.25 | 8.625 J-55 | 24 | 0 | 551 | | G 325 | 67 | 0 | |
| 7.875 | 5.5 J-55 | 15.5 | 0 | 6,332 | | G 903 | 275 | 0 | CBL |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

25. TUBING RECORD

| SIZE | DEPTH SET (MD) | PACKER SET (MD) | SIZE | DEPTH SET (MD) | PACKER SET (MD) | SIZE | DEPTH SET (MD) | PACKER SET (MD) |
|-------|----------------|-----------------|------|----------------|-----------------|------|----------------|-----------------|
| 2.875 | 6,126 | | | | | | | |

26. PRODUCING INTERVALS

| FORMATION NAME | TOP (MD) | BOTTOM (MD) | TOP (TVD) | BOTTOM (TVD) | INTERVAL (Top/Bot - MD) | SIZE | NO. HOLES | PERFORATION STATUS |
|-----------------|----------|-------------|-----------|--------------|-------------------------|------|-----------|--|
| (A) Green River | 3,864 | 6,081 | 3,776 | 5,975 | 3,864 6,081 | 0.42 | 736 | Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/> |
| (B) | | | | | | | | Open <input type="checkbox"/> Squeezed <input type="checkbox"/> |
| (C) | | | | | | | | Open <input type="checkbox"/> Squeezed <input type="checkbox"/> |
| (D) | | | | | | | | Open <input type="checkbox"/> Squeezed <input type="checkbox"/> |

27. PERFORATION RECORD

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

| DEPTH INTERVAL | AMOUNT AND TYPE OF MATERIAL |
|----------------|---|
| 5,906'-6,081' | 833 Bbls of 15% Hcl followed by a 139 Bbls fresh water over flush. |
| 3,864'-5,826' | 6,331 Bbls of Dyna HT 25 15# gelled fluid containing 530,491#'s of 20/40 mesh sand. |

29. ENCLOSED ATTACHMENTS:

☒ ELECTRICAL/MECHANICAL LOGS ☐ GEOLOGIC REPORT ☐ DST REPORT ☒ DIRECTIONAL SURVEY
☐ SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION ☐ CORE ANALYSIS ☒ OTHER: DOGM Form 7

30. WELL STATUS:

POW

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

| | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------------|--|-------------------------|--|---------------------|--|-----------------------------|--|-------------------|--|----------------------|--|------------------------------|--|---------------------------|--|------------------|--|--------------------|--|--------------------------|--|
| DATE FIRST PRODUCED: 5/28/2013 | | TEST DATE: 6/15/2013 | | HOURS TESTED: 24 | | TEST PRODUCTION RATES: → | | OIL – BBL: 134 | | GAS – MCF: 92 | | WATER – BBL: 47 | | PROD. METHOD: Rod Pump | | | | | | | |
| CHOKE SIZE: 30/64 | | TBG PRESS 110 | | CSG PRESS 400 | | API GRAVITY 39.70 | | BTU – GAS 1 | | GAS/OIL RATIO 686 | | 24 HR PRODUCTION RATES: → | | OIL – BBL: 134 | | GAS – MCF: 92 | | WATER – BBL: 47 | | INTERVAL STATUS: Open | |

INTERVAL B (As shown in item #26)

| | | | | | | | | | | |
|----------------------|------------|------------|-------------|---------------|---------------|------------------------------|------------|------------|--------------|------------------|
| DATE FIRST PRODUCED: | | TEST DATE: | | HOURS TESTED: | | TEST PRODUCTION RATES: → | OIL – BBL: | GAS – MCF: | WATER – BBL: | PROD. METHOD: |
| CHOKE SIZE: | TBG PRESS. | CSG PRESS. | API GRAVITY | BTU – GAS | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | OIL – BBL: | GAS – MCF: | WATER – BBL: | INTERVAL STATUS: |

INTERVAL C (As shown in item #26)

| | | | | | | | | | | |
|----------------------|------------|------------|-------------|---------------|---------------|---------------------------|------------|------------|--------------|------------------|
| DATE FIRST PRODUCED: | | TEST DATE: | | HOURS TESTED: | | TEST PRODUCTION RATES: → | OIL – BBL: | GAS – MCF: | WATER – BBL: | PROD. METHOD: |
| CHOKE SIZE: | TBG PRESS. | CSG PRESS. | API GRAVITY | BTU – GAS | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | OIL – BBL: | GAS – MCF: | WATER – BBL: | INTERVAL STATUS: |

INTERVAL D (As shown in item #26)

| | | | | | | | | | | |
|----------------------|------------|-------------|-------------|---------------|---------------|------------------------------|------------|------------|--------------|------------------|
| DATE FIRST PRODUCED: | | TEST DATE: | | HOURS TESTED: | | TEST PRODUCTION RATES: → | OIL – BBL: | GAS – MCF: | WATER – BBL: | PROD. METHOD: |
| CHOKE SIZE: | TBG PRESS. | CSG. PRESS. | API GRAVITY | BTU – GAS | GAS/OIL RATIO | 24 HR PRODUCTION RATES: → | OIL – BBL: | GAS – MCF: | WATER – BBL: | INTERVAL STATUS: |

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

Used for Fuel

33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

34. FORMATION (Log) MARKERS:

| Formation | Top (MD) | Bottom (MD) | Descriptions, Contents, etc. | Name | Top (Measured Depth) |
|-----------|-------------|----------------|------------------------------|-----------------|-------------------------|
| | | | | Mahogany | 2,734 |
| | | | | Garden Gulch | 3,485 |
| | | | | B Marker | 3,908 |
| | | | | X Marker | 4,410 |
| | | | | Y Marker | 4,446 |
| | | | | Douglas Creek | 4,452 |
| | | | | B Lime | 4,952 |
| | | | | Castle Peak | 5,498 |
| | | | | Basal Carbonate | 5,901 |
| | | | | Wasatch | 6,174 |

35. ADDITIONAL REMARKS (Include plugging procedure)

All Frac and Perf info is condensed. please see NOI and Subsequent Frac Sundry for a detailed record.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) Rodrigo JuradoTITLE Regulatory Compliance SpecialistSIGNATURE DATE 7/26/13

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 7

REPORT OF WATER ENCOUNTERED DURING DRILLING

Well name and number: Ute Tribal 12-04-E4API number: 4301351840Well Location: QQ NENW Section 12 Township 5S Range 4W County DuchesneWell operator: Petroglyph Operating Company, Inc.Address: P.O. Box 607city Roosevelt state UT zip 84066Phone: (435) 722-2531Drilling contractor: ProPetro ServicesAddress: 1422 East 1500 Southcity Vernal state UT zip 84078Phone: (435) 789-1735

Water encountered (attach additional pages as needed):

| DEPTH | | VOLUME (FLOW RATE OR HEAD) | QUALITY (FRESH OR SALTY) |
|-------|-----|-------------------------------|-----------------------------|
| FROM | TO | | |
| 0 | 545 | 0 | No Water Encountered |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Formation tops: (Top to Bottom)

| | | |
|----|----|----|
| 1 | 2 | 3 |
| 4 | 5 | 6 |
| 7 | 8 | 9 |
| 10 | 11 | 12 |

If an analysis has been made of the water encountered, please attach a copy of the report to this form.

I hereby certify that this report is true and complete to the best of my knowledge.

NAME (PLEASE PRINT) Rodrigo JuradoTITLE Regulatory Compliance SpecialistSIGNATURE DATE 3/29/2013



Job Number: UT131005
 Company: Petroglyph
 Lease/Well: Ute Tribal_12-04-E4
 Location: Sec. 12, T5S, R4W
 Rig Name: Aztec #673
 RKB: 5982'
 G.L. or M.S.L.: GL-5968'

State/Country: Utah/USA
 Declination: 11.18
 Grid: True
 File name: C:\DOCUME~1\PAYZONE\DESKTOP\UT131005.SVY
 Date/Time: 18-Jul-13 / 20:56
 Curve Name: Actual

Payzone Directional Services LLC

WINERVE SURVEY CALCULATIONS

Minimum Curvature Method

Vertical Section Plane 260.30

Vertical Section Referenced to Wellhead

Rectangular Coordinates Referenced to Wellhead

| Measured Depth FT | Incl Angle Deg | Drift Direction Deg | True Vertical Depth | N-S FT | E-W FT | Vertical Section FT | Distance FT | C L O S U R E Direction Deg | Dogleg Severity Deg/100 |
|-------------------------|----------------------|---------------------------|---------------------------|-----------|-----------|---------------------------|----------------|-----------------------------------|-------------------------------|
| .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 |
| 588.00 | .26 | 270.00 | 588.00 | .00 | -1.33 | 1.32 | 1.33 | 270.00 | .04 |
| 649.00 | .69 | 240.10 | 649.00 | -.18 | -1.79 | 1.80 | 1.80 | 264.16 | .79 |
| 711.00 | 1.14 | 271.90 | 710.99 | -.35 | -2.73 | 2.75 | 2.75 | 262.72 | 1.07 |
| 772.00 | 2.46 | 273.40 | 771.96 | -.25 | -4.64 | 4.62 | 4.65 | 266.91 | 2.17 |
| 832.00 | 3.20 | 279.00 | 831.88 | .09 | -7.58 | 7.46 | 7.58 | 270.66 | 1.32 |
| 892.00 | 4.10 | 272.00 | 891.76 | .42 | -11.38 | 11.15 | 11.39 | 272.13 | 1.67 |
| 954.00 | 4.80 | 268.00 | 953.57 | .41 | -16.19 | 15.89 | 16.19 | 271.45 | 1.23 |
| 1016.00 | 5.70 | 264.00 | 1015.31 | .00 | -21.84 | 21.53 | 21.84 | 270.00 | 1.57 |
| 1079.00 | 6.40 | 264.30 | 1077.96 | -.68 | -28.45 | 28.16 | 28.46 | 268.64 | 1.11 |

| Measured Depth FT | Incl Angle Deg | Drift Direction Deg | True Vertical Depth | N-S FT | E-W FT | Vertical Section FT | C L O S U R E | | Dogleg Severity Deg/100 |
|-------------------------|----------------------|---------------------------|---------------------------|-----------|-----------|---------------------------|----------------|------------------|-------------------------------|
| | | | | | | | Distance FT | Direction Deg | |
| 1141.00 | 6.81 | 260.57 | 1139.55 | -1.62 | -35.51 | 35.28 | 35.55 | 267.38 | .96 |
| 1203.00 | 8.79 | 258.64 | 1200.97 | -3.16 | -43.79 | 43.69 | 43.90 | 265.87 | 3.22 |
| 1265.00 | 10.37 | 258.02 | 1262.11 | -5.25 | -53.89 | 54.00 | 54.14 | 264.44 | 2.55 |
| 1327.00 | 11.21 | 257.41 | 1323.01 | -7.72 | -65.23 | 65.60 | 65.68 | 263.25 | 1.37 |
| 1389.00 | 12.39 | 257.27 | 1383.70 | -10.50 | -77.60 | 78.26 | 78.31 | 262.29 | 1.90 |
| 1451.00 | 12.96 | 255.87 | 1444.19 | -13.66 | -90.83 | 91.83 | 91.85 | 261.44 | 1.04 |
| 1513.00 | 13.62 | 256.04 | 1504.53 | -17.12 | -104.66 | 106.05 | 106.05 | 260.71 | 1.07 |
| 1575.00 | 14.02 | 256.31 | 1564.73 | -20.66 | -119.04 | 120.82 | 120.82 | 260.15 | .65 |
| 1637.00 | 14.00 | 257.54 | 1624.89 | -24.06 | -133.66 | 135.80 | 135.80 | 259.80 | .48 |
| 1699.00 | 14.72 | 259.12 | 1684.95 | -27.16 | -148.72 | 151.17 | 151.18 | 259.65 | 1.32 |
| 1762.00 | 14.68 | 259.43 | 1745.89 | -30.14 | -164.42 | 167.15 | 167.16 | 259.61 | .14 |
| 1824.00 | 14.85 | 257.54 | 1805.84 | -33.29 | -179.90 | 182.94 | 182.96 | 259.52 | .82 |
| 1886.00 | 16.29 | 258.90 | 1865.57 | -36.68 | -196.20 | 199.57 | 199.59 | 259.41 | 2.40 |
| 1948.00 | 15.34 | 257.85 | 1925.22 | -40.08 | -212.75 | 216.46 | 216.49 | 259.33 | 1.60 |
| 2008.00 | 15.00 | 257.00 | 1983.13 | -43.50 | -228.07 | 232.14 | 232.18 | 259.20 | .68 |
| 2070.00 | 16.10 | 262.70 | 2042.86 | -46.39 | -244.42 | 248.74 | 248.78 | 259.25 | 3.03 |
| 2132.00 | 15.70 | 262.00 | 2102.49 | -48.65 | -261.25 | 265.71 | 265.74 | 259.45 | .72 |
| 2195.00 | 15.30 | 263.00 | 2163.20 | -50.85 | -277.94 | 282.54 | 282.56 | 259.63 | .76 |
| 2257.00 | 14.70 | 262.20 | 2223.08 | -52.92 | -293.85 | 298.57 | 298.58 | 259.79 | 1.02 |
| 2319.00 | 13.90 | 260.00 | 2283.16 | -55.28 | -308.98 | 313.88 | 313.89 | 259.86 | 1.56 |
| 2381.00 | 14.14 | 262.20 | 2343.32 | -57.60 | -323.82 | 328.90 | 328.90 | 259.91 | .94 |
| 2443.00 | 15.20 | 266.00 | 2403.30 | -59.20 | -339.43 | 344.55 | 344.55 | 260.11 | 2.31 |
| 2505.00 | 14.70 | 265.60 | 2463.20 | -60.37 | -355.38 | 360.47 | 360.47 | 260.36 | .82 |
| 2567.00 | 14.60 | 265.10 | 2523.18 | -61.64 | -371.01 | 376.09 | 376.10 | 260.57 | .26 |
| 2629.00 | 15.00 | 262.60 | 2583.13 | -63.34 | -386.75 | 391.90 | 391.91 | 260.70 | 1.22 |
| 2691.00 | 15.60 | 262.60 | 2642.93 | -65.44 | -402.98 | 408.24 | 408.26 | 260.78 | .97 |
| 2753.00 | 16.10 | 261.10 | 2702.57 | -67.85 | -419.74 | 425.17 | 425.19 | 260.82 | 1.04 |
| 2815.00 | 15.70 | 260.10 | 2762.20 | -70.62 | -436.50 | 442.15 | 442.17 | 260.81 | .78 |
| 2877.00 | 15.20 | 257.60 | 2821.96 | -73.81 | -452.70 | 458.66 | 458.68 | 260.74 | 1.34 |
| 2939.00 | 15.40 | 259.00 | 2881.76 | -77.12 | -468.72 | 475.01 | 475.02 | 260.66 | .68 |
| 3001.00 | 15.90 | 260.20 | 2941.46 | -80.14 | -485.17 | 491.73 | 491.74 | 260.62 | .96 |
| 3063.00 | 16.30 | 262.00 | 3001.03 | -82.80 | -502.15 | 508.92 | 508.93 | 260.64 | 1.03 |
| 3125.00 | 16.10 | 262.00 | 3060.57 | -85.20 | -519.28 | 526.21 | 526.22 | 260.68 | .32 |
| 3187.00 | 15.56 | 259.60 | 3120.22 | -87.90 | -535.97 | 543.12 | 543.13 | 260.69 | 1.37 |

| Measured Depth FT | Incl Angle Deg | Drift Direction Deg | True Vertical Depth | N-S FT | E-W FT | Vertical Section FT | C L O S U R E | | Dogleg Severity Deg/100 |
|-------------------------|----------------------|---------------------------|---------------------------|-----------|-----------|---------------------------|----------------|------------------|-------------------------------|
| | | | | | | | Distance FT | Direction Deg | |
| 3250.00 | 14.70 | 260.10 | 3181.03 | -90.80 | -552.16 | 559.56 | 559.58 | 260.66 | 1.38 |
| 3312.00 | 13.82 | 258.60 | 3241.12 | -93.62 | -567.17 | 574.83 | 574.84 | 260.63 | 1.54 |
| 3374.00 | 13.80 | 259.47 | 3301.33 | -96.43 | -581.70 | 589.63 | 589.64 | 260.59 | .34 |
| 3436.00 | 14.37 | 261.01 | 3361.47 | -98.99 | -596.57 | 604.72 | 604.72 | 260.58 | 1.10 |
| 3498.00 | 14.37 | 260.75 | 3421.53 | -101.43 | -611.76 | 620.10 | 620.11 | 260.59 | .10 |
| 3559.00 | 14.50 | 256.22 | 3480.60 | -104.46 | -626.65 | 635.29 | 635.29 | 260.54 | 1.86 |
| 3621.00 | 14.81 | 256.44 | 3540.59 | -108.17 | -641.89 | 650.94 | 650.94 | 260.43 | .51 |
| 3684.00 | 14.92 | 258.91 | 3601.48 | -111.62 | -657.68 | 667.08 | 667.08 | 260.37 | 1.02 |
| 3745.00 | 14.11 | 260.11 | 3660.53 | -114.40 | -672.71 | 682.37 | 682.37 | 260.35 | 1.42 |
| 3807.00 | 14.94 | 262.46 | 3720.55 | -116.75 | -688.08 | 697.91 | 697.91 | 260.37 | 1.64 |
| 3869.00 | 14.20 | 260.80 | 3780.56 | -119.02 | -703.51 | 713.50 | 713.50 | 260.40 | 1.37 |
| 3931.00 | 13.50 | 259.08 | 3840.75 | -121.60 | -718.12 | 728.34 | 728.34 | 260.39 | 1.31 |
| 3993.00 | 12.60 | 257.89 | 3901.15 | -124.39 | -731.84 | 742.33 | 742.33 | 260.35 | 1.51 |
| 4055.00 | 12.17 | 257.80 | 3961.71 | -127.19 | -744.84 | 755.62 | 755.62 | 260.31 | .69 |
| 4117.00 | 11.47 | 257.54 | 4022.39 | -129.90 | -757.24 | 768.30 | 768.30 | 260.27 | 1.13 |
| 4180.00 | 10.63 | 252.80 | 4084.23 | -132.97 | -768.91 | 780.32 | 780.32 | 260.19 | 1.96 |
| 4241.00 | 9.70 | 251.74 | 4144.27 | -136.25 | -779.17 | 790.99 | 790.99 | 260.08 | 1.56 |
| 4303.00 | 8.70 | 251.56 | 4205.47 | -139.37 | -788.57 | 800.79 | 800.79 | 259.98 | 1.61 |
| 4366.00 | 8.83 | 253.85 | 4267.73 | -142.22 | -797.74 | 810.30 | 810.32 | 259.89 | .59 |
| 4427.00 | 8.20 | 254.20 | 4328.06 | -144.70 | -806.42 | 819.27 | 819.30 | 259.83 | 1.04 |
| 4489.00 | 7.56 | 254.90 | 4389.48 | -146.97 | -814.61 | 827.73 | 827.77 | 259.77 | 1.04 |
| 4551.00 | 8.50 | 257.90 | 4450.87 | -148.99 | -823.03 | 836.37 | 836.41 | 259.74 | 1.66 |
| 4613.00 | 8.48 | 264.60 | 4512.19 | -150.39 | -832.06 | 845.51 | 845.54 | 259.76 | 1.59 |
| 4675.00 | 8.00 | 263.40 | 4573.55 | -151.31 | -840.90 | 854.37 | 854.41 | 259.80 | .82 |
| 4737.00 | 7.38 | 258.81 | 4634.99 | -152.58 | -849.09 | 862.66 | 862.69 | 259.81 | 1.41 |
| 4799.00 | 6.68 | 256.26 | 4696.53 | -154.21 | -856.50 | 870.24 | 870.27 | 259.79 | 1.24 |
| 4861.00 | 6.20 | 250.30 | 4758.14 | -156.19 | -863.16 | 877.13 | 877.18 | 259.74 | 1.33 |
| 4923.00 | 5.63 | 248.80 | 4819.80 | -158.42 | -869.14 | 883.41 | 883.46 | 259.67 | .95 |
| 4985.00 | 5.32 | 252.60 | 4881.52 | -160.38 | -874.72 | 889.24 | 889.30 | 259.61 | .77 |
| 5047.00 | 5.14 | 254.50 | 4943.26 | -161.98 | -880.14 | 894.85 | 894.92 | 259.57 | .40 |
| 5109.00 | 5.01 | 259.16 | 5005.02 | -163.23 | -885.48 | 900.32 | 900.40 | 259.55 | .70 |
| 5172.00 | 5.49 | 261.30 | 5067.76 | -164.21 | -891.16 | 906.08 | 906.16 | 259.56 | .82 |
| 5233.00 | 5.49 | 262.70 | 5128.48 | -165.02 | -896.94 | 911.92 | 911.99 | 259.58 | .22 |
| 5296.00 | 4.80 | 259.40 | 5191.22 | -165.89 | -902.52 | 917.56 | 917.64 | 259.58 | 1.19 |

| Measured Depth FT | Incl Angle Deg | Drift Direction Deg | True Vertical Depth | N-S FT | E-W FT | Vertical Section FT | C L O S U R E | | Dogleg Severity Deg/100 |
|-------------------------|----------------------|---------------------------|---------------------------|-----------|-----------|---------------------------|----------------|------------------|-------------------------------|
| | | | | | | | Distance FT | Direction Deg | |
| 5357.00 | 4.35 | 268.80 | 5252.03 | -166.41 | -907.34 | 922.40 | 922.47 | 259.61 | 1.43 |
| 5420.00 | 3.74 | 276.04 | 5314.87 | -166.24 | -911.77 | 926.74 | 926.80 | 259.67 | 1.26 |
| 5482.00 | 3.16 | 270.37 | 5376.76 | -166.02 | -915.49 | 930.37 | 930.42 | 259.72 | 1.08 |
| 5544.00 | 2.99 | 266.63 | 5438.67 | -166.10 | -918.81 | 933.66 | 933.71 | 259.75 | .42 |
| 5606.00 | 2.72 | 262.20 | 5500.59 | -166.39 | -921.88 | 936.74 | 936.78 | 259.77 | .56 |
| 5668.00 | 2.59 | 267.78 | 5562.53 | -166.65 | -924.74 | 939.60 | 939.64 | 259.78 | .47 |
| 5730.00 | 2.68 | 262.28 | 5624.46 | -166.90 | -927.58 | 942.44 | 942.47 | 259.80 | .43 |
| 5792.00 | 2.15 | 250.73 | 5686.41 | -167.48 | -930.11 | 945.03 | 945.07 | 259.79 | 1.16 |
| 5854.00 | 2.29 | 251.47 | 5748.36 | -168.25 | -932.38 | 947.40 | 947.44 | 259.77 | .23 |
| 5916.00 | 1.76 | 246.90 | 5810.32 | -169.02 | -934.43 | 949.55 | 949.60 | 259.75 | .89 |
| 5978.00 | 1.85 | 242.07 | 5872.29 | -169.86 | -936.19 | 951.43 | 951.48 | 259.72 | .28 |
| 6040.00 | 1.89 | 248.97 | 5934.26 | -170.70 | -938.03 | 953.38 | 953.44 | 259.69 | .37 |
| 6103.00 | 2.07 | 234.60 | 5997.22 | -171.73 | -939.93 | 955.43 | 955.49 | 259.65 | .84 |
| 6165.00 | 1.76 | 223.08 | 6059.19 | -173.07 | -941.49 | 957.19 | 957.27 | 259.58 | .79 |
| 6227.00 | 1.80 | 225.72 | 6121.16 | -174.45 | -942.84 | 958.75 | 958.84 | 259.52 | .15 |
| 6290.00 | 1.67 | 240.14 | 6184.13 | -175.60 | -944.35 | 960.43 | 960.53 | 259.47 | .72 |
| Projection to Bit @TD | | | | | | | | | |
| 6351.00 | 1.67 | 240.14 | 6245.10 | -176.48 | -945.89 | 962.10 | 962.21 | 259.43 | .00 |

Declination: 11.18

Job Number: UT131005
Company: Petroglyph
Lease/Well: Ute Tribal 12-04-E4
Location: Sec. 12, T5S, R4W
Rig Name: Aztec #673
State/Country: Utah/USA

